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ABSTRACT

Developed during an evaluation of the Alverno College (Milwaukee, Wisconsin) Off Campus Experiential Learning (OCEL) program, this manual provides suggestions for (1) designing experiential learning programs integrating academic and off-campus work experiences for postsecondary women students and evaluating existing experiential learning activities. Part 1, Introduction to Experiential Learning, contains three chapters: The Growth of Experiential Learning Programs; Program Elements, which includes philosophy, prototypes, program development, and implementation considerations; and Alverno's Program, which overviews OCEL. Part 2, The Study, details the OCEL evaluation which intended to describe the effects of program implementation on students and faculty, describe faculty and student goals and relate goal satisfaction to program variables, and assess impact on career orientation, commitment, and patterns of graduates. (Data are based on interviews with participating and control students and involved faculty.) The four chapters of part 2 are Program Implementation, Goals and Outcomes, Impact, and Findings and Recommendations. These findings include the following: certain departments use the program more; there is general discontent with placement and work activity validity; and the program is more successful in meeting students' goals (job exploration and skill testing) than the faculty's (practical application of theory and skill testing). Appendixes, amounting to one-half of the manual, include study methodology, interviews, and evaluation data. (YLB)

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Off-Campus Experiential Learning for Women:

A Model Program

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PREFACE

Alverno College, a private Christian college for women, offers a liberal arts curriculum leading to Bachelor of Arts, Bachelor of Science, or Bachelor of Music degrees. Historically, the college is an outgrowth of three fully accredited educational institutions--a normal school, a conservatory of music, and a nursing school--established to train members of the School Sisters of St. Francis. By 1951, these three institutions had merged to become a fully accredited liberal arts college with an enrollment of both lay and religious students. The scope of Alverno's commitment has broadened, both in the people it serves and in breadth of programs available to students. The college's Board of Trustees, administrators, students, and faculty now represent a variety of faiths and backgrounds. Alverno also has a special interest in minority students and older women returning to or beginning college for the first time.

OCEL at Alverno

Alverno believes that off-campus work experiences are integral to a student's academic program; therefore, the college provides a sponsored and directed program for its students to work in business, industry, social and governmental agencies. Implemented in 1971, the OCEL program has placed more than 300 students since its inception; Alverno is nationally recognized as a leader in experiential learning.

Through her OCEL position, a student gains a working knowledge of her field by experiencing the demands and expectations of the work world and by functioning on the job as a professional. The student's work is carefully planned between the business or agency and the college to insure that the student's professional experience is directly related to her learning goals.

When a student has been accepted for an OCEL position, she and her faculty adviser determine her individual course design or how her work experience will be integrated within an existing course. This approach works toward a tangible accountability for all involved. During the time a student is involved in her OCEL program, the business or agency will be visited by the faculty adviser and the OCEL director. The director will also request an interim report on the student's progress and arrange for a final evaluation session that will include the student, her faculty adviser, the business or agency representative, and the OCEL director.

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Following is a brief sampling of placement opportunities that were recently available to OCEL students:

Archdiocesan Children's Clinic: Supervised experience in the role of a professional psychologist in an applied treatment setting.

Badger Meter: (1) Students work on developing mathematical relationships to model existing or future products. (2) Computer operator.

Cutler-Hammer: Job available in obtaining data for simulations from Cutler-Hammer salesmen and instructors, writing the simulations, submitting the simulations to practice and revision, presenting the simulations, and evaluating them.

Input--Community Video Center: The student will have training in video communications skills and a working experience with community organizations by working with and training community leaders in videotaping skills.

Miller Brewing Company: (1) A postanalysis of price action is a research project where a student could apply what she has learned. (2) Associate in chemistry.

Nelson, Gaylord, U.S. Senator: The student participates in the constituent relations operation of the senator's office by responding to constituent requests and complaints about federal agencies.

Sacred Heart Rehabilitation Hospital: To learn interviewing techniques, do intake interviews with select patients, and provide services as needed. This will include obtaining public assistance, transportation, housing, and assisting patient and family discharge planning.

State's Attorney of Cook's County: Visit courtrooms to learn the nature of the judicial process and the procedures followed. Study manuals/publications that give an overview of the juvenile judicial process. Master concepts and terminology of juvenile law. Become familiar with reasons why children are neglected or abused. Interview witnesses, social workers, probation officers, and police officers for pertinent facts about the case to be used in court. Keep a journal of OCEL activities indicating procedure followed at each step of learning and performance.

Wisconsin Telephone Company: Motivational research. The student will set up and conduct interviews with clerical workers, graph data, propose means to improve training program, and observe training sessions.

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PART I

INTRODUCTION TO EXPERIENTIAL EDUCATION

CHAPTER 1

THE GROWTH OF EXPERIENTIAL EDUCATION PROGRAMS

The Research Center on Women received a grant from the Office of Education, Women's Education Equity Act Program (WEEAP), in September of 1976 to describe and evaluate a program at Alverno College called Off-Campus Experiential Learning (OCEL). Alverno believed that this program, which started in 1971, provided experiences to women which were worth replicating elsewhere. WEEAP provided funding to evaluate and describe the program in such a way that, where appropriate, other colleges could begin or improve their own experiential education programs.

In order to understand the program at Alverno and make recommendations for its use on other campuses, it is important to see how OCEL fits into a larger picture, that of experiential education.

The last decade has seen a tremendous growth in programs which provide learning experiences in nonacademic, work-oriented settings. This has come about in response to changes in society, particularly within the makeup of the student population. Experiential education has been offered as one way to meet the needs of a more diverse student body. Since the first program to be used in a liberal arts curriculum was introduced at Antioch College in 1921 (Knowles, 1971), programs within a variety of educational settings have been developed in order to link academic endeavors with the broader community. Programs within the general concept of experiential education include cooperative education, internships, field experiences, cross-cultural experiences, and service learning internships.

Factors Encouraging the Growth of Experiential Education

Changes in the ages, attitudes, and background of students have placed new demands on institutions of higher education. The open-door policy has made a college education available to students for whom the experience was never before possible. There are fewer students following the traditional patterns of an uninterrupted college career (Cross, 1973, p. 39). As a result, the institutions of higher education have been challenged to make learning "relevant."

Also, demographic changes have affected the college populations. The post-World War II baby boom that resulted in increased numbers of college age students in the 1960s and early 1970s has passed. Increasingly, adults are returning to school, and

it is predicted that the present decade will show a 30 percent increase in the 25-44 age group in higher education (USDL, 1973). By 1980, the Census Bureau estimates, adults will form 40 percent of the total college enrollments, up from 22 percent of the total in 1970 (Wall Street Journal, December 24, 1977). The result of all these factors is a group of students who are, on the average, older, have a more varied socioeconomic background, and present a different educational challenge.

There have been a variety of responses to the need to equalize educational opportunities and career options for these changing student populations. As early as 1947, the Truman Commission addressed the need for increased accessibility of education, recommending internships for prospective teachers, counselors, researchers, and special service personnel and administrators to deal with the new consumers of higher education. Publications of the Carnegie Commission from 1968 to 1972 responded to the "new students" and suggested various ways of meeting their needs, including financial aid in the form of grants and work study, and internship experiences in community agencies. Experiential education, then, came about in an atmosphere of concern with the "new learners."

Women as New Learners

Women can be expected to comprise a sizeable portion of the adult student population. Many of those who had thought in terms of motherhood as a lifetime commitment are going back to school to prepare for a career or reentry into the world of work.

Attitudes of female students have been changing rapidly with regard to their role perceptions. In response to a questionnaire administered by one women's college to its entering freshmen between 1964 and 1970, the percentage of those indicating that 15 years hence they would like to be a housewife with one or more children decreased from 65 percent to 31 percent (Cross, 1971, p. 147). Ninety percent of all women work outside the home at some time during their lives.

Although more women are in the labor force than ever before, the percentage of them in professional and technical fields is low. In 1976, 59 percent of noncollege-educated women were employed as operatives, saleswomen, and clerical workers, as were 20 percent of women with four or more years of college and 57 percent of those with one to three years of college.[1]

Some gains have been made, but there is still gross underrepresentation of women in medicine (9%), pharmacy (12%), law (5%), architecture (3.7%), and engineering (1.7%) (Reilly & Bouvier, p. 6).

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[1]Calculations based on data drawn from March 1976 Census Tracts. Summaries can be found in Educational Attainment of Workers, March 1976, Special Labor Force Report 193.

According to U.S. Census Bureau data, only one in five managers is female.

Experiential education has been offered as one form of education which may be particularly effective in preparing women for better careers. Alverno's OCEL program places women students in real work situations within the community. This involvement is expected to have a number of effects. Employers who might not consider hiring women may be persuaded to make the short-term commitment with an OCEL placement. If that employer subsequently has a satisfactory experience with a competent woman student, he may change his attitude toward hiring women. Similarly that experience may expose the student to jobs she would not otherwise have known about. In placements where women are already part of the staff, exposure to women in management and in other positions seldom held by women may encourage students to follow similar careers (Cross, 1973, p. 19). Finally, the relevant work experience prior to job seeking should be an advantage in securing an entry level position after graduation.

Conclusion

Experiential education came about in response to changes in society and particularly within the makeup of the student population. Various programs have been developed to assist the "new learners." Alverno College offers its OCEL program as a means of meeting the special educational needs of women.

CHAPTER 2

PROGRAM ELEMENTS

Philosophy

OCEL can be described as lying within the broad concept of experiential education. According to Stephenson and Sexton (1975, p. 184), experiential education involves "fairly large amounts of time on a regular basis outside the classroom," with the students integrally involved in the learning environment, performing work which has value as real as that of the other employees. The student uses analysis and reflection as he or she would in other learning settings, the goal being "integration of facts, ideas, and experiences into a synthesis of understanding."

There is considerable variation both between and within specific programs of experience-based education. A review of the literature reveals the problems of terminology and taxonomy. As Sexton states (1976, p. 5), "More than any other factors [however], the tendency of educational institutions to label programs with a particular descriptive name for internal political designs or external funding purposes has led to this confusion of names." A study undertaken by Bender, Lucas, and Holsenbeck (1975) reveals a framework in which work experience has as its goal either "economic, vocational, intellectual, total personal social development (outcomes) or some combination thereof" (p. 16).

Sexton (1976, p. 15) has devised a typology based on his own experience within the field, identifying seven types of experiential education and weighting them with the degree to which 12 objectives or components exist in each of the types. In some cases, the name attached to a program carries little meaning, though identification with a particular prototype may yield some insight into the program's emphasis.

After considering these various taxonomies, the following prototypes were devised for this study. Throughout, the prototypes will be related to the relevant parts of Sexton's analysis.

Prototypes

Individual programs offer a unique combination of objectives, although each type tends to emphasize a particular set of goals. While most programs will not follow one model completely, the prototypes may be useful in identifying the emphasis of a program. The

following prototypes will be presented:

1. Academic (emphasizing the relationship between theory and practice)
   a. Academic Specialty (tied to one academic area)
   b. Academic Integrative (tied to theory, but not to a particular area or course)

2. Developmental (focusing on personal awareness and growth)
   a. Developmental — personal growth
   b. Developmental — career exploration

3. Vocational (related to career preparation; assumes the student has chosen a career area)

Academic. In the academic model, experiential education provides a framework in which the student can test the relationship of academic theory to reality. Programs with an academic philosophy may have two different emphases: one relates the experience to a particular course or area of concentration (the academic specialty prototype); the other is based on a synthesis of knowledge from several areas (academic integrative). Both stress the aspect of content and theory. The academic approach is not necessarily tied to the concept of practical application of theory, but it does provide the student with a concrete model for how to demonstrate the theory.

The academic aspect of the experience is of prime importance in both versions of this model. In order to insure the academic component, faculty involvement is essential.

In the academic specialty model, the experience is directly related to a course or an area of concentration. Supervision usually comes from the specific academic area to which the experience relates. The internship, field experience, policy research, and cross-cultural experiences have a strong academic component in Sexton's analysis.

The academic integrative approach, popular in the liberal arts colleges, provides experiential education as a vehicle for the integration of academic principles from many areas. Development of "liberal skills" or competence is an objective, the implication being that all vocations require a certain level of basic functioning in addition to specific vocational skills. The experience in this case may not be related to a particular major or course, but is seen as an opportunity to blend ideas from various areas into a composite of learning. For this reason, its supervision may come from the area of academic concentration or it may be tied to the counseling (or competency) area.

Developmental. The developmental approach emphasizes self-awareness and role exploration. Less emphasis is likely to be put on the relationship of the placement to a particular academic area or

vocation; the student is rather encouraged to sample a variety of experiences which meet her needs. Career exploration, if viewed as gaining knowledge of self and the world of work, is related to this approach. Programs adhering to this philosophy may take their supervision from the counseling area.

Sexton classifies the general education internship, field experience, and cross-cultural experience as having a heavy emphasis on personal objectives; however, among those programs he categorizes, he sees only the general education internship having career exploration as a frequent objective.

Vocational. In the vocational approach, experience-based education provides a link between the academic community and the world of work. The value of the experience is related to the student's chosen vocational field, the experience having developed from the student's area of concentration. The placement allows her to test her skills in a preemployment situation, and assignments are expected to increase in difficulty as she moves through the curriculum. Supervision is generally tied to the major academic area.

General considerations. These philosophies rarely exist in pure form within a program. Nevertheless, the articulation of a program's philosophy is considered important by a number of writers in the field. Ralph Tyler (in Wilson & Lyons, 1961, p. 11) emphasizes, "When cooperative education is treated as a basic concept for relating theory to practice in education and when flexible arrangements and varied procedures are evolved, rather than a rigid set of operations, the resulting program is more likely to become a successful one."

Although it may appear that the rhetoric of experiential education is categorical, it must be restated that overlap among philosophies is not unusual. A program may have more than one broad objective, but it is from the philosophy that the program receives its direction. It is this clarification of goals, rather than the terminology attached to it, that provides a base for the structure of the program.

Program Development

Assuming that the objectives of the program have been delineated, consideration must be given to the factors of policy and implementation. The nature of work experience programs requires the coordination of faculty, student, and business community. Obtaining faculty support and matching the needs of the student to community placements are essential elements in any work experience program, while decisions relating to the awarding of credit, scheduling, requirements to participate, and financial compensation may be left to the discretion of the institution. The implications for these implementation procedures tend to be influenced by the predominating philosophy of the program.

Faculty involvement. To maintain academic credibility, it is

recommended that there be a flow of ideas between the classroom and the work setting. It is through this process that ideas are tested and reality is brought to bear on theoretical concepts. Faculty support for the experience encourages the student to bring practical problems encountered on the job back to the classroom for discussion (Stephenson & Sexton, 1975, p. 188).

It can be difficult to obtain faculty support for experiential education in a liberal arts college where the emphasis has traditionally been on the arts and humanities. However, the concept of "liberal skills" (Stephenson & Sexton, 1975, p. 180) or competences may be effective in bridging the gap between vocational and enrichment goals.

Matching the student to the placement. A key factor in the success of a work experience program lies in the ability of the coordinator to match the student with an appropriate placement. As a first step, the needs of both student and employer need to be clarified and articulated. Before a match is made, the coordinator should determine the student's skills, personal attributes, and goals and have a clear understanding of the job requirements of the employer.

If a program is optional, more selectivity may enter into the process of screening students for participation in the program. Seaverns (1974, p. 5) recommends selection be based on academic achievement, personal qualities, the placement's proximity to the student's residence, and needed occupational competences.

Variation in the selectivity by the community placement representative may also be a factor. A placement for preprofessional work experience will probably require more selectivity than one designed as a less in-depth experience for career exploration.

Another facet in selectivity concerns the screening of community placements for the program. This must be done with a view toward the major goals of the program. If the goal is to provide a setting which will allow the student to test theory in practice, the academic orientation of the program must be clarified with the placement and a setting must be chosen which will be consistent with that goal.

Implementation Considerations

Credit. The awarding of credit for experiential learning has been a matter for much debate. While recognizing that all experience does not constitute learning, Robert Kirkwood (in Keeton, 1976, p. 151) advises that outcomes of education, rather than processes, should be considered as the base for assessment of learning, whether that learning was achieved in the classroom or in an experiential setting. He states that if learning is to be creditable, it must be "clearly and demonstrably related to well-defined objectives." Another approach to credit advises that credit be given not for the experience itself, but

for reflection upon the experience in light of the theory (Stephenson & Sexton, 1975, p. 193).

Requirements for participation. A work experience program may be mandatory or it may be optional. If participation in the program is required for a particular degree, the implication is that it has a unique value within that discipline (Seaverns, 1974, p. 26), and the program becomes a screening device which eliminates those who cannot function in the working world of a particular career area. Consideration must then be given to helping these students find other avenues of fulfillment. If the experience is mandatory for all programs within an institution, then the problem is magnified.

Scheduling. The experience may be scheduled in a variety of ways. In some programs, students experience alternating periods of immersion in the classroom followed by a period of work experience. In other programs, the work experience may be concurrent with school attendance. For alternating placements, one quarter or semester of each is generally advised. No specific length of time was found to be favored for concurrent placement. One possibility is to relate the length of time to the purpose of the placement. For example, placements for the purpose of career exploration may be shorter and less in depth than those designed for the upper level student who has clarified her career choice.

Level. Off-campus work experiences may take place at various times within a student's college career. Again, it is recommended that the goals of the placement determine the academic level required of the student. If an exploratory vocational goal is indicated, the experience may come within the first two years of school. If the assignment is seen as a culminating experience for someone who has been studying for a profession, it may take place toward the end of the student's academic program. Many assignments assume a basic level of previous academic background in an area.

Compensation. In some work experience programs, the student is paid for her participation; in other programs, the student volunteers her services. If the student is paid, care should be taken to insure that financial aid does not become the overriding goal of the program. Some argue that a paid position gives a student a greater sense of independence and maturity, while others indicate that a nonpaid experience puts the student in a less pressured situation and may give her greater flexibility of experiences.

A paid experience may be most feasible in a situation where students alternate periods of work and school with two students covering a particular position in alternating time slots. This tends to place the experience within the category of "real work" with commensurate responsibilities and benefits. This is likely to be the case in a program which places its emphasis on the vocational goals.

According to Sexton (1976, p. 42), "whether or not a student receives financial compensation does not seem to have a significant effect on the educational impact of the activity."

Conclusion

The articulation of the program's philosophy is necessary as the first step in developing a program of experiential education. While each of the implementation factors must be considered in the context of the program's resources, the sources reviewed stressed one overriding recommendation: the implementation of an experiential education program should take place within the context of the philosophical base of the program. It is important that policies reflect the program goals in operational terms.

CHAPTER 3

ALVERNO'S PROGRAM

During the 1960s, Alverno College was embarking on a program of self-study, asking its educators how they might better assist their students to become more effective learners. Among other concerns, the problem of relating theoretical concepts and classroom learning to life and work experiences outside the classroom was being discussed. In 1970, when the students indicated an unwillingness to learn basic communications, the faculty concluded that the students' lack of motivation was due to a perceived lack of relevancy. The president of the college began meeting with members of the local business community, including representatives of the American Society for Training and Development, to see if there might be ways of cooperatively providing learning experiences outside the classroom which would lead to the vital link between theory and application.

In 1970, Alverno College stated that its mission was to provide an effective education for women. Off-Campus Experiential Learning (OCEL) along with the development of an outcome-oriented curriculum, have been two of the specific responses to this mission.

By fall of 1977, the college completed the transition from credit-based to competence-based education. The eight areas of competence which have been identified in the Alverno Learning Process are: communications ability; analytic ability; problem solving ability; valuing in decision making; effective social interaction; understanding of the environment; understanding of the contemporary world; and knowledgeable response to the arts and humanities. Alverno stresses the need for the development of competence within the context of academia.

The OCEL Philosophy

The OCEL philosophy is closest to the academic integrative model with an emphasis on theory and competence. In a videotape presentation done in 1972, S. Celestine Schall, the first director of the program, emphasized theory as the "undergirding of what you are doing" and presented the program as a means of "bridging the gap between the academic and the real work world." This same emphasis on the educational aspect of the experience is found in numerous documents which were developed at Alverno College to describe the program for new faculty:

> OCEL is a deliberate effort to provide Alverno students with opportunities in life situations through which they can learn to become more reflective under real-time conditions, create

and test ad hoc theories of action,[2] and move from classroom directed to self-directed learning.

The importance placed on the reflective nature of the experience is similar to Argyris' recommendation that preprofessional education be redesigned to emphasize using feedback from experience as the data base for continuous learning (Argyris & Schön, 1976).

While the program provides a real work setting, the emphasis does remain on the educational goals. Morris Keeton, executive director of CAEL (Council for the Advancement of Experiential Learning), has pointed out:

> As college education--and especially liberal arts education--becomes less and less an assured route to employment, closer linkages between college and work are necessary. This does not mean that higher education must have greater occupational content, but that the intermixing of education and work experience can be a way to bridge the gap between education and work for the college student. (Keeton, 1976, p. 123)

The OCEL program is intended to be flexible enough to meet the individual student's educational and preprofessional needs while enhancing the academic curriculum.

Program Development

The OCEL program has clearly outlined policies and procedures dealing with the faculty involvement, matching the student to the placement, requirements for participation, scheduling, credit, and compensation. Consistent with its academic emphasis, faculty guidance and the student's educational outcomes are emphasized throughout.

Implementation

Faculty involvement. The concept of mentor occupies a central role in OCEL in two important ways: first, the faculty mentor is to be involved in the course design that specifies behaviors, assessments, and other ways to measure outcomes of mutually agreed upon goals; second, the mentor's responsibility is to provide feedback and support to the student throughout the placement. The relationship of a faculty mentor to the student's experience has been articulated by Stephenson and Sexton (1975, p. 188): "It may be more advisable to have the theory tested under supervised field conditions in which the instructor and the student can rebuild, defend or refurbish it, than to have the theory

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[2]The phrase, "to become more reflective under real-time conditions, create and test ad hoc theories of action" is also found in Argyris and Schön, p. 188.

destroyed forever as a result of one bout with a hostile, non-theoretical situation." The practical problems of providing a support system of this nature is an area for further exploration. In general, OCEL mentors have been tied to the content area. If the experience is viewed in the context of developing an area of competence, it is conceivable that the mentor could be tied to an area of competence rather than to an academic department.

The program does not require specific papers or presentations. In practice, reflection upon the experience may be encouraged by record keeping, oral and written reports, videotapes, or seminar presentations, but this is left to the discretion of the individual instructor.

The educational role of the business mentor has not been so clearly articulated. It is the responsibility of the business representative to provide a job description clarifying the experiences available with the placement. The suitability of the student for the placement is determined in an interview. The business representative is expected to take part in the assessment of the student's performance in her OCEL.

Matching the student to the placement. Since the program emphasizes the educational aspects of the experience, the experiential involvement of the student should be closely related to the student's learning goals. One mechanism to facilitate this is a meeting between the OCEL director, the faculty mentor, and the student, in which the student's goals are to be clarified. Job descriptions which have been submitted by businesses and agencies are reviewed at this time to find the appropriate placement. The director is responsible for submitting the student's application and credentials to the business or agency representative and for arranging a meeting between the student and the representative so that each may determine whether their needs are likely to be met by the placement.

Requirements for participation and screening. OCEL has not been a requirement for graduation, although some departments seem to be moving in this direction. A prime selection factor in the program involves the maturity level of the student as observed in a college setting. Recommendations have been made for the development of a selection committee. As previously mentioned, the community placement is expected to screen the student through the interview process as well as through an examination of her credentials and application.

Scheduling. OCEL experiences take place concurrently with school attendance, although there have been instances where the student has been involved in an OCEL during the summer or the interterm break. The length of the OCEL has varied from 1 to 32 weeks, the most common structure being 16 weeks, or one semester. No specific policy has been established with regard to the academic level required for student participation in OCEL.

Credit. Assessment is scheduled to occur midway through the

experience and again at the end of the placement. It is to consist of an evaluation by the faculty mentor and by the business supervisor and a self-evaluation by the student. Documentation in the form of a final narrative from the business representative is intended to provide the additional relevant information to the student's credential file.

Credit, either as part of a course or as an independent study, was awarded for OCEL's completed between 1971 and 1976, the period reviewed under the WEEAP grant. As more of the students made the transition from credit base to competence base (transition completed in fall of 1977), the assessment has been redesigned to reflect competence levels. Units of credit, or CLU's (Competence Level Units), are awarded to reflect both content and competence achievement in the present program.

Compensation. OCEL is not designed as paid experience. Rather, the student is seen as exchanging "her talent and time for a professional's shared expertise and time" (OCEL pamphlet, 1975). It is thought that the nonpaid aspect of the program gives the faculty mentor more control over the experience to insure the academic component.

Conclusion

OCEL embodies the basic elements of experiential education, emphasizing the educational aspect of practical experience. The policies and procedures rely heavily on each participating faculty member to help the student articulate and meet her individual educational goals. It is seen as the arena in which the student can test her theories and abilities against real world situations and benefit from the feedback involved in this process.

PART II

THE STUDY

PURPOSE OF THE STUDY

After five years' experience with its Off-Campus Experiential Learning (OCEL) program, Alverno College obtained a grant under the Women's Educational Equity Act Program to evaluate the results of the OCEL experience. The present study had three purposes. The first was to describe the implementation of program policy and procedures as it affected the students and faculty involved in the program. The second was to describe the faculty and student goals and to relate the satisfaction of these goals to program variables. The third was to assess the impact of the experience on the career orientation, career commitment, and career patterns of graduates.

The data are based on interviews with students who were involved in the OCEL program, a comparison group of students who were not involved in the program, and faculty at Alverno who were involved in the OCEL program. A full description of the study methodology is given in appendix A.

The purpose of the present description of the program is to provide suggestions for other colleges which may be interested in starting experiential learning programs. Throughout, the emphasis is on evaluating the data so that other programs may benefit from the experience of students and faculty who have participated in Alverno's OCEL program.

CHAPTER 4

PROGRAM IMPLEMENTATION

In designing an off-campus experience for college students, two considerations take on major importance. The first is how to relate the program to the academic curriculum. The college must maintain the educational integrity of the curriculum without losing the unique benefits an off-campus learning experience can provide. This consideration is no less relevant to college programs with a vocational emphasis than to programs which would share Alverno's educational emphasis, as the sponsorship of a college presumably requires some educational component. A second consideration is how to insure that the placement itself will provide a valid opportunity to attain educational goals. Selecting, monitoring, and maintaining a variety of such placements are major administrative challenges to any off-campus program. The student and faculty experience with the program implementation will be described first with respect to the academic considerations and then with respect to the placement considerations.

Academic Considerations

As noted earlier, the OCEL program at Alverno has a strong educational emphasis. The program is interested in "theory as an undergirding of practice" and stresses the role of the experience in moving the student from "classroom directed learning to self-directed learning."[1] However, the student and faculty mentor are expected to articulate the student's specific educational goals for her OCEL experience.

The program places the responsibility for many of the decisions on the student and her faculty mentor. There are no established prerequisites for the experience and it is not as a matter of policy required for graduation in any major. Similarly the amount of time the student will spend at a particular placement is determined by the faculty and student and approved by the placement representative on the basis of that particular student's educational goals. In practice, a number of patterns emerge with respect to these faculty-student decisions.

Requirements and levels. The OCEL program policy does not establish any minimum prerequisite for an OCEL placement. In practice, most of the students do not take an OCEL until they are juniors or seniors,

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[1] See "OCEL Philosophy," page 11 above.

but as the following figures indicate, there were freshmen and sophomores who participated in the program:

Freshman	8 percent
Sophomore	11 percent
Junior	48 percent
Senior	34 percent

Since approximately one third of Alverno's students are older than the traditional 19-25 years, it seemed possible that older students were not waiting as long to become involved in an OCEL. However, there was no significant relationship between the student's age and her academic year at the time of her first placement (see appendix D).

Participation in the OCEL program is not a requirement for graduation in any major. We asked department heads how many of their majors were involved in the program. Thirty-one (31) percent of the department heads did say that all of their majors completed an OCEL experience; 15 percent said some of their majors participated in the program; 38 percent said that only one or two of their majors had taken an OCEL; and 16 percent said none of their majors had taken an OCEL. At this point in the program's development, less than half of the departments are involving a large number of their majors in the OCEL program. However, almost all departments have had some participation.

We asked the faculty if there were any major or academic level for which the OCEL experience was most appropriate. During the first five years of the program, students received credit for their OCEL participation. At the time we interviewed the faculty, the college had adopted a competence-based program. The faculty responses were in terms of the six competence levels at Alverno. The two top levels (5 and 6) were considered most appropriate by 54 percent of the faculty, with earlier levels recommended by 18 percent. Eighteen (18) percent of the faculty felt that an OCEL placement was more appropriate for some majors than others, with 5 percent indicating that OCEL's should be restricted to major areas which did not have established internship programs.

The fact that some departments involve more of their majors in the OCEL program than others may be related to a number of factors. In some cases, the major area appears to offer a great deal of material that relates well to experiences available in the community. Other major areas require more effort to translate the academic component into a form that is applicable to the available placements.

A college considering an OCEL program should decide whether it is interested in involving all majors in the program. Where this is the case, it might be advisable to ask the departments to prepare and periodically update specific guidelines for how their major might best be related to available community experiences. As the department members work on such guidelines they would be able to articulate the difficulties they anticipate or have encountered in relating their

major area to the available placements. This would also provide the opportunity for faculty to discuss their concerns with the effect of OCEL placements on the academic integrity of their major requirements.

Faculty supervision. In the OCEL program, the individual faculty mentor has the responsibility for providing the guidance and support needed by the student. Ninety-four (94) percent of the faculty stressed the faculty mentor's responsibility for assuring the academic component of the OCEL experience. However, the faculty have a variety of approaches to providing this assurance.

Some of the faculty exercised considerable supervision over the student, with 23 percent requiring the student to keep a log of her experience and to discuss this log on a one-to-one basis with the faculty member. Fifty-nine (59) percent of the faculty used a tutorial method, meeting with the student and discussing aspects of her experience. However, fully 24 percent of the faculty expressed the view that the placement was intended to provide the opportunity for the student to test her skills. This latter group of faculty felt this opportunity was sufficient to establish the educational nature of the experience and engaged in no activities specifically designed to monitor or encourage any additional learning.

There was also considerable variance in the amount of time the faculty reported spending with their OCEL students: 6 percent had daily contact with the student, 47 percent weekly contact, 12 percent biweekly, 12 percent triweekly, and 24 percent sporadic contact. Most of the faculty, 94 percent, had only one OCEL student in a given semester. The remaining 6 percent indicated they used seminar or classroom contact to handle some larger groups of students.

From the student interview we were able to obtain more detailed information about the amount of time spent in one-to-one faculty student contact. We divided the amount of contact into three categories. Daily contact of an hour or more or weekly contact of more than an hour was considered high contact. Daily contact of less than an hour or weekly contact of one hour was considered medium contact. Weekly contact of less than one hour or less than weekly contact was considered light contact. There was high contact reported by 8 percent of the students, medium contact reported by 20 percent of the students, and light contact reported by 73 percent of the students. In addition, 17 percent of the students volunteered that the faculty should become more involved in supervising the experience.

Faculty mentoring appears to be very uneven, with some faculty exercising considerable supervision and others considering supervision unnecessary. As noted, most faculty members have only one OCEL in a given semester, but those with more than one often indicated that they used the OCEL participation as part of a course or seminar requirement. This could account for the light contact for many of the students.

A college considering an OCEL program may be reluctant to commit a great deal of faculty time to supervision of individual students outside of classroom contact. Alverno's program does not appear to require a heavy investment of faculty time. However, there was some indication that the faculty and students would prefer to increase the amount of faculty supervision. The time devoted to student supervision may vary depending on whether the experience is part of an ongoing course, seminar, or independent study. This variability in faculty time should be taken into account when relating OCEL supervision to faculty course load requirements.

Academic component. The program does not provide specific guidelines for relating the OCEL experience to the different majors or the content of specific courses. However, it appears that in practice the experience does relate to a major area which is of interest to the student.

We asked the student if the OCEL experience met her needs as a student in her major area. Forty (40) percent expressed enthusiasm about how well their needs were met, 37 percent felt they had been basically satisfied with how well their needs were met, and only 16 percent had specific complaints about how well the needs in their major area were met by the placement.

We also asked the students to indicate what relationship had been established between the OCEL experience and course material. Forty-five (45) percent could give a detailed relationship, 30 percent some general relationship, and 26 percent could not give any relationship. In some cases, the students indicated that the experience related to their major but did not relate to part of the course offerings at Alverno. An example might be a computer placement for a math major, when the college did not have relevant computer courses for its students.

A college developing an off-campus experience might consider that one of the benefits of the program may be providing material related to academic majors which could not be provided within the budgetary restrictions of a private college. In some cases the faculty could be encouraged to assign special readings of the material relevant to the placement or to create additional independent study courses to parallel experiences available in the community.

Length of placement. The student, faculty, and business are expected to reach an agreement on the length of the placement and the number of hours per week that the student will spend at the placement. Within the academic curriculum, the OCEL is regarded as an additional course, seminar, or independent study. In practice, the length of the OCEL is typically 1 semester with an average of 6 hours per week spent at the placement. Sixty-two (62) percent of the students had agreed on this arrangement, with 1 to 8 hours a week spent at the placement. Another frequent arrangement agreed on was the concentrated OCEL of 12 to 40 hours per week: 24 percent of the placements had this arrangement

and were 1 to 6 weeks in length. A third type of agreement was the extended OCEL with 16 to 32 weeks averaging 6 hours a week. Only 14 percent of the students had agreed to an extended placement.

We asked the students if they had worked the same, more, or fewer hours than agreed on and if they would have liked to have worked more hours. Only 33 percent both worked the same number of hours agreed on and did not want to spend more time on their OCEL placement. The students saw some difficulty with increasing the amount of time at the OCEL, indicating that this would require a reduction in their non-OCEL course load. Neither the student's desire to spend more time on the OCEL nor her concern with such an increase interfering with her present work load was related to the length or concentration of the OCEL she had agreed to participate in.

We asked the faculty if 8 hours per week for 1 semester would be a good arrangement. Seventy (70) percent thought it was, while 30 percent did not. Only one suggested a shorter experience, and none a less concentrated experience. It is not clear whether this arrangement would have been more satisfactory for the students but it would increase the concentration of the experience somewhat over the typical 6 hours a week for 1 semester.

In general, the program seems to be having difficulties determining satisfactory and realistic estimates of time that will be required for a particular OCEL. The students seem to feel the need for a greater allotment of time. Since the 1 semester, 8 hours a week model is satisfactory to the faculty and is only slightly more time than is presently the case in the typical OCEL, it could be adopted as a standard minimum, with increases where the faculty mentor, student, and business representative agree.

Paid vs. nonpaid. The program takes the position that the learning experience is enhanced by the special nonpaid status of the student. It should be noted that 70 percent of the students had an additional job while they were taking their OCEL placement. Thus the students would seem to be in need of the money they could be receiving from a paid OCEL experience.

We asked the students if they felt the placements would have been willing to pay them and if they felt that being paid would have changed their experience. About half the students indicated that the employer would have, in their opinion, been willing to pay them. The students were about equally divided on the question of whether or not such payment would have changed their experience. Only 5 percent of the students volunteered that the program should adopt a policy of paid placements.

Programs adopting a nonpaid policy might investigate ways in which College Work Study (CWS) funds could be used in conjunction with off-campus placements. These funds would only be available for

placements at nonprofit agencies and for students who qualify under federal guidelines for CWS.

Evaluation. The program was awarding credit for satisfactory completion of the OCEL placement during the first five years of the program's development. The program required the faculty, placement representative, and student to each evaluate the student's learning experience. The faculty did not seem satisfied with this arrangement; 82 percent volunteered that the faculty mentor should be the principal assessor with comments such as, "The faculty should have a bigger role in the evaluation of the student."

The students learned of the faculty evaluation in a number of different ways: 34 percent received written reports, 43 percent received a personal verbal report, and 30 percent received an evaluation in a group discussion setting. However, 28 percent of the students did not know what the faculty evaluation of them was. The business evaluation was more likely to be a written report, with 54 percent using this method, and was less likely to be unknown (17 percent).

We asked the students if the evaluation of their OCEL experience was adequate. Of those who were awarded credit for the experience, 92 percent were satisfied that the evaluation was adequate. Of those who did not know if they were awarded credit, only 36 percent were satisfied that the evaluation was adequate.

The major problem with the evaluation appears to be communicating this evaluation to the student. If the OCEL experience is to be an effective learning experience, the evaluation procedures should assure that the student understands how her performance was evaluated, particularly where that performance has not been satisfactory.

Placement Considerations

The program places few restrictions on the type of placement or work activity which can be included in the OCEL program. The responsibility for establishing contacts with the community, obtaining a variety of placements, and selecting valid placements rests with the OCEL director. Each placement has a representative whom the OCEL director can contact to communicate information about the student's placement. In practice, providing valid placements and involving placement personnel pose a number of problems.

Placement settings and activities. The OCEL experience is based on work activity in a community setting. We identified six categories of placement settings used in the OCEL program, with the following percentages of usage in our sample:

Social Service	39 percent
Schools, Churches, and Hospitals	20 percent
Service Industries	15 percent
Manufacturing	14 percent
Artistic and Cultural Enrichment Centers.	7 percent
Law and Government Offices	4 percent

While social service settings were used most often by the program, it is evident that a variety of settings have been used.

There was also a great variety of work activity described by the students. The descriptions seemed to reflect the individual student's experience more than the expectations of the placement. For example, students who were in the same placement gave different descriptions of their activity, although they were presumably expected to be doing the same thing.

The students who were placed in social service settings (39 percent) described activities ranging from child care worker to group therapist. Twenty-four (24) percent of the students were involved in technical activities, mainly within laboratory settings or in data processing. Fifteen (15) percent worked in special projects for the placement, 15 percent described their activity as predominately observation, and 8 percent were principally involved in clerical tasks.

We asked the students if there were any responsibilities (in addition to those agreed on for the placement) which they would have liked to have had. Nine (9) percent said there were additional responsibilities they did take on, 37 percent said there were additional responsibilities they would have liked to have taken on, and 54 percent said there were no additional responsibilities they would have liked.

The variety and validity of the placements were commented on by the students in a number of different ways. Thirty (30) percent indicated a concern with the validity of the placements, including suggestions that the program exercise more care in selecting placements and that each student investigate her own placement before undertaking the OCEL. Similarly, 30 percent indicated dissatisfaction with the number of placements they had to choose from, including requests for a greater variety of placements and suggestions that the students be allowed to secure their own placements.

The variety and validity of the placements were also commented on by the faculty. Of the 13 department heads, 67 percent were satisfied that there were adequate placements available for their majors, 25 percent were not sure, and 8 percent said available placements were not adequate for their majors. Of the faculty, 45 percent expressed an interest in becoming more involved in obtaining and screening placements for their students. On the other hand, 45 percent of the faculty stressed the OCEL director's responsibility for making community contacts which would assure a large number of placements to choose from.

The placements used by the program include a wide range of community settings. However, there is considerable dissatisfaction with the variety and validity of these placements, with 60 percent of students indicating problems and 45 percent of the faculty interested in becoming more involved in the screening of placements. This is surprising in view of the fact that 84 percent of the students felt that their placements satisfied their needs as students in their major areas. The difficulty appears to be that students and faculty have higher expectations concerning the variety and validity of placements.

Programs which emphasize providing an educationally valid experience for the student should be prepared to face some difficulties in finding a large number of valid community placements. In addition, the difficulty of determining the nature of the new placements will undoubtedly produce some experiences which are not optimal from the educational standpoint. One approach which might help to improve the variety and validity of available placements is to develop "stables" of placements for each major or competence area. Each semester one area could be the focus for efforts to increase, monitor, and weed out placements in that area. However, this would not remove all the difficulties. If it is to survive, an off-campus program, particularly in its early stages, must be able to tolerate problems in providing a large number and variety of valid placements.

Business representatives. The program does not provide guidelines for the supervision of the student by placement personnel. However, each placement has some representative who made the arrangements with the college and authorized the placement. In some cases this representative also directly supervised the student's activities. It was not uncommon for the supervisory role to be shared by two or more placement personnel. For this reason it was very difficult to get an accurate picture of the placement supervision from an interview with the placement representative responsible for accepting the student placement.

There was limited contact between the faculty and the placement personnel, with only one faculty member having contact with the placement personnel as often as once every three weeks. The others had more sporadic contact.

Students stressed the importance of communicating their educational goals to placement representatives. Forty-five (45) percent of the students stressed the need to define and/or communicate their goals to the placement. While 61 percent of the students indicated that there was a clear understanding of their goals, 11 percent indicated some problems with establishing this understanding and 28 percent indicated that the placement personnel definitely did not understand their goals.

We asked the students how well the employers' needs had been

met by their activity at the placement. Only 7 percent indicated there was some problem in meeting the employer's needs.

The students' problems in communicating their goals do not appear to be a result of any failure on their part to perform the work expected of them. Rather there would seem to be a need for greater communication between the program and the placement personnel so that the educational goals of the students could be better understood by the placements.

Support from placement personnel. We asked a number of questions about the kinds of reactions students encountered from other people at the placement. Seventy-seven (77) percent indicated they had received a positive reaction from people at the placement. Ten (10) percent indicated that others considered their activity unusual for a woman and 7 percent indicated that people at the placement became more accepting of them over time.

We asked the student if there were one or more men or women whom the student considered successful at the placement. In 73 percent of the placements, students indicated at least one successful woman was present and in 90 percent of the placements they indicated at least one successful man was present. There was a significant relationship between the type of placement and the presence of a successful man or woman.[2] The percentages of each type of setting that had successful men and successful women is given below.

	Women	Men
Social Service	85 percent	60 percent
Community Service	75 percent	87 percent
Business	52 percent	86 percent

We also asked if the student had seen or been helped by the persons they considered successful. Thirteen (13) percent of the successful men were not helpful and only 11 percent of the successful women were not helpful. The students also received help from other persons at the placements, 57 percent from other women and 60 percent from other men.

It seems that the student receives considerable support from placement personnel. Most students received help from more than one person and most received help from at least one person they considered successful.

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[2]Tables showing each of the significant relationships between variables are given in appendix E.

CHAPTER 5

GOALS AND OUTCOMES

Goals

Alverno's program emphasizes educational outcomes and places responsibility for articulating each student's goals on the faculty mentor and student. We were interested in what the faculty felt the most important outcomes for the OCEL experience should be. We asked the faculty to rank eight goals which represent a number of educational and practical outcomes of an off-campus experience. The faculty ranks are given in table 1.

TABLE 1. Faculty and student modal rankings of eight goals for the OCEL experience

Goal	Faculty	Students
Testing the practical application of theory and course content	1	2
Testing my skills	2	1
Getting objective feedback on career potential	3	5
Working with people I can learn from	3,4	2
Finding out if a job really interests me	4,7	1
Learning what a variety of people actually do on their jobs	6	8
Providing relevant work experience for my résumé	7	7
Meeting people who would help me in future job searches	8	6,7

The faculty consider the practical application of theory and course content as the most important outcome for the program, with testing the student's skills and the student's receiving feedback on her career potential as the second and third ranked outcomes. It is interesting to note that the competence-based program at Alverno requires all competences to be demonstrated within academic content areas. It is not then surprising that the faculty gives application of theory and course content top priority in the OCEL program. The fact that the testing of skills is ranked second may reflect the faculty's commitment to the competence aspect of education. Similarly the third ranked goal, feedback on career potential, is consistent with the demonstration of skills and competences. It is interesting that the faculty places the least value on the student's meeting people who may help her find a job, thus reflecting the program's relative unconcern with student placement.

We were also interested in whether the students agree with the faculty's priorities for the OCEL experience. The student modal rankings are given in table 1. However, a better picture of the students' goals emerges from considering the number of students giving the top three ranks to each outcome (table 2).

TABLE 2. Percentage of students assigning the top three ranks to each goal

Goal	Rank			Total in top 3
	1	2	3	
Testing my skills	30	20	16	66
Finding out if a job really interests me	24	13	13	50
Working with people I can learn from	16	17	17	50
Testing the practical application of theory and course content	14	20	10	44
Getting objective feedback on career potential	7	11	14	32
Learning what a variety of people actually do on their jobs	6	9	7	22
Providing relevant work experience for my résumé	3	6	16	25
Meeting people who would help me in future job searches	0	6	9	12

The students generally do not agree with the faculty on the overriding importance of the practical application of theory and course content. Only 14 percent ranked this outcome first and only 44 percent ranked it among the top three. Rather the students see testing skills and finding out if the job interests them as the most important outcomes. Similarly they place more value on having people to learn from at the placement than the faculty does.

It is interesting that, while the students do not share the faculty's emphasis on practical application, they are not viewing the program as a means of finding a job. Rather students seem to be interested in expanding their skills and accepting the placement as another classroom--a classroom which will provide a new set of teachers to learn from and a new environment to learn about.

Goal Satisfaction

We also asked the students to indicate whether each outcome had occurred for their OCEL experience. The percentage of the students who experienced each outcome is given in table 3.

Interestingly, the three goals which together account for the top rank of 70 percent of the students (interest in job, testing skills, and

TABLE 3. Frequency of outcomes reported by students for the OCEL experience

Outcome	Frequency
I tested the practical application of theory and course content	66
I was able to test my skills	80
I received objective feedback about my career potential	58
I worked with people I could learn from	83
I was able to find out if that job interested me	90
I learned what a variety of people actually do on their job	68
It provided relevant work experience for my résumé	75
I met people who would help me in future job searches	47

people to learn from) are the outcomes with the highest probability of occurring with percentages of 90, 80, and 83 respectively.

The three goals which are ranked highest by the faculty are not as well met. The testing of skills, a value the faculty shares with the students, is well met with 80 percent of the students reporting this outcome. However, the application of theory to practice is occurring in only 66 percent of the placements and feedback on career potential occurs in only 58 percent of the placements. The program seems to be having more success in satisfying the students' goals than it has had in meeting the faculty's goals.

Meeting Educational Goals

We were interested in what policy and procedures might be instrumental in obtaining educational outcomes. We examined the data for relationships between program factors and outcomes. Both the application of theory and course content and the testing of student skills were more likely outcomes if 1) the student believed that her needs in her major area of concentration had been met by the selection of the placement, and 2) the student could give a specific relationship between her OCEL experience and some course material. In addition, the application of theory to practice was related to two student characteristics. This outcome was more likely if 1) the student placed a high value on the application of theory and course content, and 2) the student was older than the traditional 19-22 years.

From the point of view of program development, these three factors do suggest some policies which might be helpful. When a student defines her educational goals, she might be required to indicate the course material she plans to relate this to. If she has not completed any such course material, she might be expected to postpone her OCEL

until she has, or to take an independent study which would provide such material before the OCEL placement. Part of the requirements for credit for such a placement might be a written or verbal demonstration of the relationship between the experience and the course material. Faculty could be encouraged to provide questions based on the student's log of her experience which would provide an incentive and guidance to the student in developing this relationship. Some attention might also be given to demonstrating to the students the value that other students have found in making the application of theory to practice.

Meeting Student Goals

There were only two goals which the students ranked highly that were not highly valued by the faculty. The students placed a high value on finding out if the job at the placement would be interesting to them and they wanted to find people in the placement whom they could learn from. The students did find out if the job interested them in 90 percent of the placements. This seems to be a reliable outcome of the program as it is presently administered. However, finding people to learn from was more variable, with 83 percent of the students experiencing this outcome.

The student had people to learn from at the placement when 1) the student felt that the selection of the placement satisfied her needs in her major area, 2) the student placed a high value on this outcome, 3) there were successful men at the placement, and 4) there was a successful woman at the placement who helped the student.

A program that wishes to satisfy the students' goals might consider both selecting placements that relate to the students' major area and screening placements for the availability of "successful" personnel. Since we left the definition of successful to the student, the individual student might be encouraged to participate in this selection process. It seems likely that when a student's needs in her major area are met, the student will find there the people with the skills she is interested in learning. If these people are successful, the student will learn the skills she needs to follow a career related to her major area.

Practical Outcomes

The remaining four outcomes are not independent. Learning what people do on a variety of jobs, feedback on career potential, and help in finding a job are all related to each other; where one occurs, the other two are also more likely to occur. Also, help in finding a job is more likely where the experience provides material that is relevant for the résumé. From their relationship to other variables, the following picture emerges.

Both feedback on potential and meeting people who will be helpful in finding a job are related to 1) establishing a clear understanding

about the student's educational goals, 2) the belief that the work activity would not have been different if the employer had been paying for the student's work, 3) more time spent with the placement representative, and 4) learning about what a variety of people do on the job.

Feedback on potential was also related to the students' placing a high value on this outcome. Meeting people who would be helpful in finding a job or provide references was least likely in social service placements.

Learning what a variety of people do on their jobs was related to the presence of a successful woman who had contact with the student. Similarly we found that students who could give more information about the job structure at the placement were more likely to have had successful men and women at the placement.

In general, it seems that the feedback on career potential and meeting people who will be helpful in job hunting depend somewhat on performing activities very like those of a paid employee, establishing a good relationship with placement personnel, and learning about the job structure at the placement. The opportunity to learn about the job structure appears to depend on the presence of personnel the student considers successful.

From the point of view of program development, it would seem that considerable attention should be given to establishing a good relationship with the placement personnel and selecting placements where the student will have contact with men and women she will consider successful. If any career exploration outcomes are valued by the program, these factors appear to be essential for an effective program.

CHAPTER 6

IMPACT

We were also interested in what effect the program was having on the career motivation and career patterns of students. An attempt to examine the impact on employer attitudes and employment practices floundered on a number of methodological problems discussed in appendix A.

The impact of the program on students was assessed by comparing three groups of students. One group, the no-interest group, had never contacted the program or attempted to find an OCEL placement. The second group, the interest-only group, had at some point actively attempted to become involved in the program but never completed an experience. The third group, the OCEL group, had completed at least one OCEL experience. Only students who had graduated from Alverno were considered in these comparisons. Two aspects of career motivation--career orientation and career commitment--were examined, as well as the student's present employment status.

There were no significant differences between the groups in the number of students from each graduating class, their age, number of children, or marital status. However, the students who took OCEL's were significantly less likely to be involved in either field or internship experiences. This is some support for the notion that an OCEL program can provide the internship type of experience for liberal arts graduates. Students with internship experience were less likely to participate in the OCEL program. Presumably students involved in the traditional internship programs were already receiving many of the benefits that might otherwise have attracted them to an OCEL experience.

Career Orientation

We were interested in how the program may have affected the students' long-range plans and their commitment to a career. We found that 79 percent of the OCEL graduates did have plans to be working five years from the time of their interview with 67 percent planning to be working full time. Eighty-four (84) percent of the students could indicate at least one career they would like to be pursuing in the next five years.

Comparisons between the three groups indicated that students in the no-interest group were less likely to indicate one or more careers they would like to be pursuing five years from now. There was little difference between the interest-only and the OCEL group. This suggests

that students attracted to the program are more career-oriented than other students.

Career Commitment

One criticism of women workers sometimes raised is that they are likely to leave their careers in order to marry or raise children. Eighty-one (81) percent of students with an OCEL experience do not consider marriage a factor which would change their career plans. Only 49 percent of the students with OCEL's felt that children would not change their career plans.

Comparisons between the three groups showed that students who had indicated no interest in the OCEL program were more likely to consider children a factor in their career plans, with 69 percent feeling children would change their career plans, while there was little difference between the interest-only and OCEL groups. This suggests that the students who are attracted to the program are more committed to careers than those who are not attracted to the program.

For students who did take an OCEL, career commitment was related to the students' experience with placement personnel. If there had been at least one woman the student considered successful at the placement, the student was more likely to feel that children would not alter her career plans. Similarly, if the student had received help from other women at the placement, she was more likely to feel that children would not interfere. It may be that these women are providing models of women coping with both career and family commitments. They may also provide social support for the dual role of marriage and career. This is an area which could be considered when designing research into the ways in which off-campus programs influence the career plans of women.

Career Patterns

Of the students who had taken the OCEL, 77 percent were working full time at the time of the phone survey, 10 percent were working part time, 14 percent were not employed, and 10 percent were continuing their education. The type of employment was categorized according to the census classifications. This breakdown is given in table 4 for the OCEL, the no-interest, and the interest-only student groups.

Comparing the three groups, we found that students who had experienced an OCEL were more likely to be employed full time, with 76 percent employed full time compared to 69 percent of the students in the no-interest group and 44 percent in the interest-only group. This indicates that the employment differences are not a result of differences in motivation, rather the students who take OCEL experiences are more able to get full-time employment. Since the no-interest group has a high rate of other internships, it is possible that the OCEL experience provides the liberal arts graduates with the skills that are often provided by internship programs.

TABLE 4. Census classification of present employment for each of the three groups

	OCEL	No-Interest	Interest-Only
Professional[a]	26	15	9
Teachers/Nurses ...	29	49	13
Managers	5	6	0
Sales	2	0	0
Clerical	15	8	6
Service	1	2	0
Operatives	1	0	3
Other	0	0	0
Total	79	80	31

$X^2 = 23.58$ $p < .05$

[a]Professionals excluding teachers and nurses.

When we compared the types of work for the three groups, we found that there was a significant difference in the types of jobs held by OCEL students. OCEL students were more likely to hold professional positions other than teacher or nurse. Thirty-three (33) percent of the OCEL group, 29 percent of the no-interest group, and 19 percent of the interest-only group had professional positions other than teacher or nurse. The OCEL group was also the least likely to be involved in teaching or nursing. Thirty-seven (37) percent of the OCEL graduates were involved in these professions, compared with 61 percent of the no-interest group and 41 percent of the interest-only group.

The OCEL program seems to have an impact on the careers of its graduates. They are more likely to be working full time and more likely to be in professional positions other than those traditional nursing and teaching professions.

It should be noted that this impact is not the result of any program policy designed to place students in nontraditional jobs for women. However, there were a number of students engaged in activity that is not usual for women. We asked the students to rate their OCEL activity along the following dimension and the results are presented below.

Usually done by women	33 percent
Done by women as often as by men	39 percent
Sometimes done by women	9 percent
Rarely done by women	19 percent

Thus in 28 percent of the placements the activity was neither that which is usually done by women nor that which is done by women as often as by men.

It is very difficult for any variable within one course offering to have a statistically demonstrable effect on the eventual employment pattern of students. None of our variables shows such a relationship if we hold firmly to the .05 level of statistical significance. However, there are a number of interesting relationships which would be significant at the .06 level. These relationships are consistent and interesting and suggest a trend which might be considered in other research examining the factors related to the impact of off-campus programs. The student was more likely to have plans to work if 1) the student had learned what a variety of people do in their jobs, 2) the student had successful women at the placement, and 3) the placement was in a business setting. It seems that students who learned about the job structure through their OCEL's and students who had the opportunity to see other women successfully pursuing careers, were more likely to make long-range career plans themselves. Also learning about the job structure tended to relate to later salary.

In general the OCEL program has considerable impact on the career patterns of its students. Participation in the program seems to contribute to more full-time employment, and perhaps to the pursuit of professional careers other than the traditional nursing and teaching careers. The program attracts students who are more career-oriented and more likely to be committed to a career. Within the program, learning about the job structure of placements and having working women as models and sources of social support may produce or perhaps merely sustain the student's career orientation and commitment.

CHAPTER 7

FINDINGS AND RECOMMENDATIONS

A number of findings stand out as being particularly descriptive of the program and its effects. A summary of these outcomes is presented here.

Program Implementation

1. In practice, the OCEL is generally taken more by seniors and juniors, and the program is used more by some departments for their majors than by others.

2. Faculty supervision outside of course work and seminar participation is fairly light. While the faculty favors the one-to-one contact with the student for supervision purposes, in practice the faculty spends a limited amount of time in such contact.

3. The program is providing placements which satisfy the students' needs in their majors. In most cases this does not involve a specific relationship between the experience and course content.

4. It is difficult to estimate the most satisfactory and realistic time for each OCEL experience before the student becomes involved in the placement.

5. In spite of the students' feeling that the placements meet the needs of students in their major, there is considerable faculty and student discontent with the validity of the placements and work activity. The students and faculty have higher expectations about the variety and validity of placements than is presently available in the program.

6. The placement supervision is shared by a number of placement personnel in many cases.

7. Most students find at least one man or woman whom they consider successful at the placement. They receive social support from these people and from others at the placement.

Goals and Outcomes

1. The faculty felt the most important outcomes for an OCEL experience were the practical application of theory and course content and the testing of student skills.

2. The students felt the most important outcomes for an OCEL experience were finding out if the job interests them and testing their skills.

3. The program is having more success in satisfying the students' goals than it has had in meeting the faculty's goals.

4. Educational outcomes are more likely when a) the placement satisfies the student's needs in her major area of concentration, b) a relationship is established between the experience and specific course content, and c) the student values the application of theory to practice.

5. Having people to learn from in the placement is related to a) the placement satisfying the student's needs in her major area of concentration, b) having successful men and women at the placement, and c) the student placing a high value on having people to learn from at the placement.

6. Practical outcomes relate to a) establishing a clear understanding about the student's educational goals with the placement, b) work activity which would not be different if the employer were paying for the student's work, c) spending more time with the placement representatives, and d) learning about what people do in a variety of jobs.

7. The opportunity to learn about the job structure is related to the presence of successful men and women at the placement.

Impact

1. Students attracted to the program are more likely to have a specific career which they intend to pursue and are less likely to see children as a factor affecting their career plans.

2. Students who participate in the program are more likely to be employed full time and are more likely to have professional positions other than the traditional teaching and nursing positions.

3. Students who learned about the job structure at their OCEL placement and students who had the opportunity to see other women successfully pursuing careers were more likely to make long-range career plans themselves.

4. Students were more likely to feel that children would not change their career plans if a) there was at least one woman at the placement the student considered successful and b) the student received help from other women.

5. There was a trend in the data suggesting that the presence of women the student considers successful increases the probability that the student will have a better paying job after graduation. This is not due to direct help in finding a job or to seeking a job at the placement. Rather the student learns more about a variety of jobs and may become a more sophisticated job applicant.

Recommendations

1. A program that is interested in involving all major departments might be advised to ask the departments to prepare specific guidelines and examples of how the major might be related to available community experiences. The program should encourage department members to articulate the difficulties peculiar to their majors and their concerns with maintaining the academic integrity of the course offerings.

2. One of the benefits of an off-campus program is that it may provide the opportunity to give the student material related to her major that is not presently available in the course offerings. In some cases, the faculty could be encouraged to assign special readings in that area or to create additional independent study courses to parallel the experiences available at the placement.

3. The 1 semester, 8 hours a week model was acceptable to Alverno's faculty and could be adopted as the minimum student time commitment for an OCEL experience.

4. Any program which wishes to provide an educationally valid experience for the student should be prepared to tolerate the number of cases where this will not occur. The nature of community placements and the problems of selection inherent in any program of this nature make it inevitable that some placements will not be as valid as others.

5. A program which places the major emphasis on educational outcomes would be advised to require the student to indicate before the placement is made what specific course content she will relate to her OCEL. Placement should also relate to an area of academic concentration.

6. In programs interested in relating theory and course content to practice, students who successfully accomplish this should demonstrate the value of this outcome for other students considering an OCEL placement.

7. A program that places a value on the practical outcome of placements should be careful to communicate the educational goals of the program to the placement personnel, emphasize activities which closely approximate those of paid employees, and provide men and women the student will consider successful as models and resources. The student should also be encouraged to establish a good relationship with placement personnel and to learn about the job structure of the placement.

APPENDIXES

APPENDIX A

STUDY METHODOLOGY

The Women's Educational Equity Act Program provided funding for a description and evaluation of Alverno's Off-Campus Experiential Learning (OCEL) program. The purpose was to provide guidance for similar program development by other liberal arts colleges. Of particular concern was an evaluation of the impact the program could have on the career motivation and career patterns of women college graduates. The proposal required that the study base this evaluation on interviews with students, faculty, and placement representatives.

The first step in the study was to list the goals of the program, probable outcomes which were either intended or not intended, and variables which might measure the impact of the program on students and the business community. This listing was based on the proposal, discussions with the acting OCEL director, and interviews with the faculty and former students recommended by the acting OCEL director.

On the basis of this list, interviews were designed and pretested on small samples. Four types of interviews were designed: a student interview, a student phone survey, a faculty interview, and a placement representative interview. The interviews were designed to provide a description of the faculty, student, and placement experience with the goals and procedures of the program and information on variables which could have been affected by participation in the program. The samples were selected to provide both a representative description and the basis for the following:

1. The identification of the program variables which relate to the successful accomplishment of different immediate outcomes.

2. A demonstration of the impact the program may have on career motivation and career patterns.

3. A demonstration of the impact of participation in the program on the employment attitudes and practice of the placement settings with respect to women.

The list of goals, proposed student interviews, and the comparisons which were to be the basis for the inferences were presented to an advisory group of Alverno administrators, faculty, placement representatives, and former OCEL students. The listing and comparisons are given in appendix B. The actual interview questions for each type of interview are given in appendix C.

Having received the advice and approval of our advisory group, we first examined the program records to get a description of the population and then determined our sampling procedures.

The Population

From our interpretation[1] of the records of the program, the following picture emerged. In the first five years of the program, 159 students participated in the program for a total of 237 placements. While 100 students had a single placement, 43 had two placements, 13 had three placements, and 3 had four placements. Thus 37 percent of the students returned for more than one placement.

The age at the time of the student's first placement ranged from 19 to 51. Sixty (60) percent were in the traditional age range of 19-22 and 71 percent were 30 or younger.

There were 46 additional recorded student contacts with the program that did not result in completed OCEL experiences.[2] Ten students initiated an OCEL and withdrew after placement; 11 students made an OCEL inquiry but cancelled before placement; 1 music student completed the OCEL but chose not to do it for credit; and 3 groups totaling 24 students used contacts provided by the OCEL office to do class projects but did not engage in the OCEL process.

Of these 46 students, 21 had a recorded faculty mentor and 8 students went on to complete an OCEL experience in a subsequent semester.

There were 23 students who had ONCEL (On-Campus Experiential Learning) placements. Of these, 11 had both ONCEL and OCEL placements. These on-campus experiences tend to follow the more traditional patterns of independent study, guided research, or on-campus work-study projects. Students who had participated in the ONCEL were interviewed in the pretesting of the student interview but were otherwise excluded from the study.

A total of 109 business or agency settings have recorded OCEL placements. Of these settings, 62 (57 percent) had more than one placement; 13 (11 percent) had from 5 to 21 placements, with an average of 8 placements.

A total of 53 faculty have been involved in the program, representing 23 different departments. The faculty member with the greatest involvement has had 28 placements. The four most involved faculty members have 78 placements among them. Two departments, psychology and sociology, stand out as supervising the largest number of placements, with 76 placements between them.

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[1]Each student has a personal record of her participation. There are also summary lists of program participants. Only students with complete personal records who were also listed as participants were considered to have had a completed OCEL experience.

[2]Personal communication from S. Celestine Schall, Nov. 28, 1977.

The Samples

Student interviews. For our description of the program we attempted to contact and interview all 127 students on record as having completed one or more OCEL experiences in the first five years of the program who were no longer students at Alverno College. We reached 86 percent on the phone. The remaining 15 students were sent questionnaires, but all 15 were returned by the post office due to incorrect addresses. Of the 112 reached by phone, 22 indicated they had not completed an OCEL experience and so were not interviewed. Of the remaining 90 students, 84 percent were subsequently interviewed. Eleven (11) said they were unavailable for an interview, and 8 were living too far away to be interviewed economically by our staff. These 19 were sent a questionnaire and 13 (68 percent) answered and returned the questionnaire.

The final interview sample consisted of 74 students.[3] Comparing those who were interviewed with those not interviewed, there were no significant chi-squares for the differences in the number of placements, year of graduation, age at the time of the OCEL, or age at the time of the phone contact. Since the questionnaire sample was so small, it was inappropriate to use the chi-square statistic on most of the questionnaire data. However, no systematic differences were apparent. The interview sample appears not to have been systematically biased by the exclusion of the 19 students who were unavailable for interviews.

Student phone survey samples. To demonstrate the impact of the program on student career motivation and career patterns, phone surveys were conducted with three groups of students. The first group were those OCEL students who had graduated from Alverno and who had been contacted by phone for interviews. There were 81 of these students and they were designated the OCEL group.

The second group was designated the interest-only group. These students had had some contact with the program but indicated they had not completed an OCEL. We attempted to reach 40 students who were on record as having contact with the program but not as having a completed OCEL. Of these, 32 (80 percent) were reached. The 22 students whose record we interpreted[4] as indicating they had completed an OCEL experience, but who indicated they had in fact not completed an OCEL experience, were also included in this group.

The third group for the phone survey was selected from a list of graduates of Alverno and was designated the no-interest group. These students had no record of contact with the program and reported that they had in fact had no contact with the program. A random, stratified sample was selected from the list to insure that this group of 91 would be comparable to the completed OCEL group in year of graduation and type of degree earned.

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[3] Three students whose records did not place them in our category of completed OCEL's indicated they had completed an OCEL. They were interviewed and included in this group.

[4] See footnote 1, page 41.

Faculty interviews. Personal interviews were conducted with 23 faculty members. All 17 faculty members on the staff who had served as mentors were interviewed. All department heads regardless of their experience as mentors were also interviewed. No attempt was made to contact faculty mentors who no longer were at the college at the time of the study.

Placement representative interviews. To assess the impact of the participation in the program on the employment attitudes and practices of the placement settings, we conducted interviews with representatives from 42 placement settings. Five groups were selected to represent five different types of program participation. Three of these groups were settings which were listed as having available placements for the 1976-77 academic year. The first of these had considerable participation with from three to eight students having placements at each setting during the preceding five years. The second had light participation with one or two students. The third had never actually had a placement, but were available. Two additional groups were considered. These placement settings were not listed as active. One group had apparently withdrawn without ever having a placement; the other had light participation, with one to two students. We selected a random stratified sample to insure that each group was representative of the following six categories of settings:

Social Service
Schools, Churches, and Hospitals
Service Industries
Manufacturing
Artistic and Cultural Enrichment Centers
Law and Government Offices

We did not restrict the sample with respect to how recent the participation was.

We encountered a great variety of difficulties with these interviews. Four of the more frequently occurring problems were 1) the representative of record had left the placement setting and was either unavailable, unwilling to see us, or when contacted was not a valid source of information about the current employment attitudes and practices of the placement; 2) due to considerable time since the placement and/or the supervision of field experiences or internships from other institutions, there was considerable difficulty in remembering much about the student, her placement experience, or the details of the Alverno program; 3) the placement representative identified in the student's file had relatively little contact with the student, having been responsible for authorizing the placement but having appointed others to work directly with the student; and 4) having had no experience as yet with the program, the representatives were more curious to know how the program operated than they were able to describe their understanding of the program.

These problems are largely a result of the groups selected for the comparison. In future, placement personnel should be contacted

no later than six months after an OCEL placement for research purposes. Interviews with placement personnel should not focus on the one representative of record, but include a number of individuals with whom the student has contact, the personnel who will be making future employment decisions, and those who will be making future decisions about participation in the program.

As a result of these problems we estimate that as many as 50 percent of these interviews provided data that were not valid for many questions. Since the remaining 50 percent could no longer be assumed to be either random or stratified, the data was not analyzed and is not presented in this report.

The Data Analysis

The significance of comparisons is based on a chi-square for 2x2 and/or 2x3 contingency tables that are significant at the .05 level or better. The chi-squares for the most relevant comparisons for the interview group are given in appendix D. The tables of the significant relationships are given in appendix E. The chi-squares for the comparisons between the different groups of graduates are given in appendix F. The significance tables are given in appendix F.

APPENDIX B

PROPOSED MEASUREMENT OF PROGRAM GOALS
February, 1977

PROGRAM GOAL	RESEARCH GOAL	RESEARCH ACTIVITY	COMPARISONS
A. Demonstrate the value of theoretical knowledge as an undergirding of practical operations	1. Describe academic course or theory component	Faculty interviews Student interviews	Faculty concerns and needs to student concerns and needs
	2. Assess relative importance of this component to students and faculty	Questionnaires and student interviews Faculty interviews	How student ranks a number of goals to how faculty ranks a number of goals
	3. Assess perceived conflicts in relative importance of this goal	Faculty interviews Student interviews	How often faculty ranks this #1 vs how often they expect students to rank it as #1 Similar for students
	4. Compare to similar programs	Literature search Letters Interviews	Stated goals

APPENDIX B (cont.)

PROGRAM GOAL	RESEARCH GOAL	RESEARCH ACTIVITY	COMPARISONS
B. Coordinating on-campus learning with off-campus experience	Describe the degree of interfacing and relate to outcome	Face-to-face interviews and questionnaires	
Procedure:			
1. Match student and employer needs	Describe faculty and student evaluation of match. Estimate the effect of mismatches	Faculty interviews Student interviews Questionnaires	1. Faculty evaluation to student evaluation 2. Good vs Not-so-good on other procedure variables and outcome variables
2. Define goals and objectives for each student	Assess perceived agreement on goals	Faculty interviews Student interviews Questionnaires	1. Student's most important goal to student's selection of most important goal of faculty 2. Faculty most important goal to faculty selection of most important goal of student 3. OCEL's with clear understanding to OCEL's with less, on other procedure variables and outcome variables
3. Define clear criteria for meeting objectives and evaluation procedures	Describe common outcomes not reflected in the evaluation and relate to setting variable to find out where they were most likely to occur	Faculty interviews Student interviews	1. Compare different categories of neglected accomplishments on setting variables

APPENDIX B (cont.)

PROGRAM GOAL	RESEARCH GOAL	RESEARCH ACTIVITY	COMPARISONS
Procedure (cont.)			
4. Agreed on time limit	Assess accuracy of time agreement and describe reason for discrepancies	Student interviews Questionnaires	1. Relate type of discrepancy to other procedure variables and complaints
5. Adequate documentation to use as supplement to transcript	Describe importance of documentation to students	Student interviews Questionnaires	1. Compare students who rank it high, with others--age, major, and career commitment before and after OCEL
6. Access to information, faculty mentor, and business mentor	Describe frequency of contact and accessibility of mentors, the setting variables which may effect this or be effected by the amount of contact	Faculty interviews Student interviews Questionnaires	1. Yes to No on other procedure variables, process variables, and outcomes
Special Characteristics			
7. Maintaining a nonthreatening role of student (no pay)	Describe perceived effect of pay vs no pay Describe estimates of possibility of pay	Faculty interviews Student interviews Questionnaires	1. Relate to business category, job titles, and setting variables

APPENDIX B (cont.)

PROGRAM GOAL	RESEARCH GOAL	RESEARCH ACTIVITY	COMPARISONS
C. Provide a learning experience for the student with the following components:	Describe frequency of these components and the perceived relative value of these components	Faculty interviews Student interviews Questionnaire	
1. Student identifies and experiences a wide range of opportunities	Assess student/faculty agreement and perceived agreement on the most important goal		Compare faculty and student rankings Compare respondent's most important goal that she sees as important to mentor
2. Student examines and assesses her own skills	Describe the setting experience which may be contributing to the frequency of these components		Compare Happens to Not-Happens for each component in setting variables
3. Student internalizes a good self-concept and feels she is a competent member of the work force	Describe the setting experience which may be a result of different values on the part of the student		Compare students with High vs Low rankings of each component on setting variables
4. Student applies course content to a variety of occupations			

APPENDIX B (cont.)

PROGRAM GOAL	RESEARCH GOAL	RESEARCH ACTIVITY	COMPARISONS
D. Information Outcomes: student knows about a number of occupations and which would provide a good income source, promotional possibilities and goal fulfillment	Assess students' information about the job market and determine if the habit began while on the OCEL Also relate to setting experience	Interviews	Relate amount of information to amount learned about the particular OCEL jobs Compare students with different degrees of detail on setting variables and procedure variables
	Discover if OCEL students have a more detailed picture of the job market	Questionnaires	Compare OCEL with non-OCEL students
E. Attitude Outcomes: student has heightened career aspirations; more interest in nontraditional roles; a breakdown of stereotypes about self and career potential	Describe students' perceptions of how OCEL changed their career plans	Student interviews Questionnaire	
	Discover if OCEL students have different career plans and different attitude toward the effect of marriage and children on career plans	Phone interviews	Compare OCEL students to matched group of non-OCEL students
	Relate attitude outcome to setting experience		Compare heightened career oriented with less career oriented on setting variables and procedure variables

APPENDIX B (cont.)

PROGRAM GOAL	RESEARCH GOAL	RESEARCH ACTIVITY	COMPARISONS
F. Employment outcomes: OCEL students are most likely to: work after graduation; have higher salaries; have more nontraditional jobs	Discover if the employment picture is different for OCEL graduates	Phone interviews	Compare OCEL graduate with non-OCEL graduate
	Relate employment outcomes to setting experience		Compare salaries and job categories for different values of each setting variable
G. Impact on business: lowering the employer attitudinal barriers to nontraditional jobs, encouraging them to recognize women's full career potential	Discover if OCEL involvement changes business practices	Business interviews	Compare active OCEL businesses who have and have not had students

APPENDIX B (cont.)

PROGRAM GOAL	RESEARCH GOAL	RESEARCH ACTIVITY	COMPARISONS
H. Maximize the impact of the program Possible setting experience variables: 1. Presence of a successful role model 2. Help from female others 3. Presence of a successful male role model 4. Problem pull 5. Help from male others 6. Flexible setting 7. Practice in a non-traditional role 8. Practice in a role created for a student vs a role created for an employee 9. Job climate 10. Length of one semester	Identify setting experience which produces maximum impact on the setting	Student interviews	Compare attitude, information, and employment outcomes for different values of each of these variables

APPENDIX C

INTERVIEWS

Appendix C-1. Student Interview

Appendix C-2. Student Phone Survey: OCEL

Appendix C-3. Student Phone Survey: Comparison Groups

Appendix C-4. Faculty Interview

Appendix C-5. Letter of Introduction to Placement Representatives

Appendix C-6. Placement Representative Interview

APPENDIX C-1

STUDENT INTERVIEW

Introduction

Before we begin, I'd like you to be aware of the fact that your answers will be strictly confidential. After this interview, I will be identifying the information you supply by a code number rather than by name.

When we talked on the phone, I believe you mentioned that you had taken one OCEL. Where was that OCEL placement? (If the OCEL placement was identified on the phone---"Let me clarify--You said it was at-----.")

OR

When we talked on the phone, I believe you mentioned you had taken more than one OCEL. Where were those OCEL's? Which had the most influence on your career development? For the purpose of our study, please answer the interview questions with respect to that OCEL.

1. Where was your OCEL(s)?
   If you took more than one OCEL, which had the most influence on your career development?

2. What was the job title?

3. Could you give me an overview of what you actually did?

4. Were there other people in the organization who did the same thing you did? Or was the position new for the organization?

5. Was the OCEL one semester? More? Less?

6. What was your major at the time?

7. According to the initial agreement, how often were you to go in? Did it turn out to be that? If there was a discrepancy, could you tell me how that came about?

8. Would you have liked to spend more time per week at your OCEL?

9. How well were your needs as a student met at the OCEL placement? How well were the needs of the organization met by the OCEL placement?

10. How did your work experience relate to your courses? Could you name a particular course it related to? Could you name an example of how it related?

11. Do you think an employer would have been interested in paying you?

12. If the employer had paid you, do you think it would have changed what you did?

13. What advantages do you see to being a student rather than an employee in this setting?

14. Here are eight cards with possible outcomes of an OCEL experience. Which of these describe what you got out of your OCEL experience? Did we miss anything? Is there anything you would like to add?

    Experience Cards and Goal Cards

    1. I met people who would help me in future job searches.
    2. I received objective feedback about my career potential.
    3. I was able to test my skills.
    4. It provided relevant work experience for my résumé.
    5. I was able to find out if that job interested me.
    6. I worked with people I could learn from.
    7. I tested the practical application of theory and course content.
    8. I learned what a variety of people actually do on their job.

    As you see it, how important are these outcomes? Please rank them from 1--most important to 8--least important.

    Which of these do you think was the most important for your faculty advisor? Which of these do you think was most important for your business contact?

15. At the beginning of your OCEL, did you, your faculty advisor, and business contact understand what you were to accomplish? If not, what problems were there?

16. How accessible was your faculty advisor for information and advice? How often did you have contact with him/her?

17. How accessible was your business contact for information and advice? How often did you have contact with him/her?

18. Were there any additional responsibilities you felt you wanted to take on?

19. In taking on these additional responsibilities, did you find you needed any special information or advice? How did you find what you needed?

20. When you first started, how did other people react to your being there on the job?

Did you see there was any change in their reaction after you had been there a while?

21. When you first started, did they think you were doing something unusual for a woman? Did you see any changes in this attitude after you had been there a while?

22. Was there any change in the kind of work expected of you while you were there? If so, did you feel the change was slow? About right? Or faster than you had expected?

23. Were there any women there you considered successful? What were their/her job title? Is this job of the successful women/woman:

(With more than 1 successful women, how many of the jobs that were filled:)

__ usually filled by women?
__ filled by women as often as by men?
__ sometimes filled by women?
__ rarely filled by women?

Did you have contact with them/her? Did they/she offer help? Did any woman offer help?

24. Were there any men there you considered successful? What was his/their job title? Did you have contact with him/them? If not, why not? Did he/they offer to help you? Did any man offer to help?

25. Was there any one there who would provide references?

26. Did anyone go out of their way there to help you find a job?

27. Your job title was _____. Is this position:

__usually filled by women?
__filled by women as often as by men?
__sometimes filled by women?
__rarely filled by women?

28. Consider the people you had contact with. What were the job titles? What job provided the best income? Do you know what that salary might be? What job provided the best opportunity for advancement?

29. What do you see as possible occupations for someone like yourself, outside that particular____? Other than___?

30. Keep in mind these job titles, what is the range of starting salaries--the lowest and the highest starting salary?

31. Could you give me a job history for the last five years (not employers, just job titles)? [Date and Job Title]

32. Would you mind very much indicating what category your income for

the year falls in?

__less than $5000	__$11,001-13,000
__$5001-7000	__$13,001-15,000
__$7001-9000	__$15,001-17,000
__$9001-11,000	__$17,001 or more

33. What were your career plans before you took the OCEL?

34. How did the OCEL experience contribute to your career plans?

35. What would be your major complaints about the program?

36. Did the evaluation adequately reflect all that you had accomplished? If not, what was missed?

37. What advice would you give a student starting an OCEL program at Alverno?

38. What advice would you give an administrator starting an OCEL program at another school?

APPENDIX C-2

STUDENT PHONE SURVEY: OCEL

This is _____ calling. I'm working for Alverno College on a study of the OCEL program. We have received a grant to look into the development of these programs. We are particularly interested in what former OCEL students are doing. I'd appreciate it if you could answer a few questions for me.

1. Did you take an OCEL? Just one?

2. Were you a Freshman, Sophomore, etc. when you took it?

3. Did you take an OCEL for credit or competence?

4. Did you participate in any off-campus learning experience while you were at Alverno: field experience? internship?

5. Are you married? If not, are you single, widowed, separated, or divorced?

6. Do you have any children? Or do you have any dependents other than yourself? How many? Ages?

7. Are you presently working? If yes: do you work for an industry, school, business, hospital? Other? What is your job title? Is this full time or part time? If no, have you worked since leaving Alverno?

8. What do you see yourself doing five years from now? If answer is working: Full time or Part time? Would marriage affect this? Would children (additional) affect this? Is there anything else which would affect this?

***

I really appreciate your taking the time to answer these questions. I'd like to talk with you further about your OCEL experience. Could I get together with you for a half hour, an hour or so sometime this week? I could come to your home at that time if that's convenient for you. [If it is not possible to arrange a personal interview]: Would you be willing to fill out a questionnaire, if we send you one?

APPENDIX C-3

STUDENT PHONE SURVEY: COMPARISON GROUPS

This is _____ calling. I'm working for Alverno College on a study of off-campus experience offered by the college. We have received a grant to look into the development of these programs. We are particularly interested in what former students are doing now. I'd appreciate it if you would answer a few questions.

1. Did you participate in any off-campus learning experience while you were at Alverno? Field experience? Internship?

2. Were you ever involved in the OCEL program? Did you meet with the director (discuss)? Look for a placement? Begin an OCEL?

3. What was your major? What degree did you graduate with?

4. Are you married? Single, widowed, divorced, separated?

5. Do you have any children? Or dependents? How many? Ages?

6. Are you presently working? Do you work for an industry, school, business, hospital, other? What is your job title? Full time or part time? If no, have you worked since leaving Alverno?

7. What do you see yourself doing five years from now? Full time or part time? Would marriage affect this? Would children (additional) affect this? Is there anything else which would affect this?

If yes to OCEL, where? faculty mentor?

APPENDIX C-4

FACULTY INTERVIEW

Introductory Statement---confidentiality

First, I'd like to ask you about your own experience with the OCEL program.

1. Have you been the faculty mentor for students in the OCEL program? How many? How many of those are this semester?
   If no, how about names? Did you go through the OCEL director?

2. What type of settings were they in?

3. Were these independent studies? Part of a course? Part of a seminar requirement? If yes, did everyone in that course (seminar) take an OCEL? If no, what were the difference in the course requirements and/or the credit if the student took an OCEL?

4. As a faculty mentor, what were your responsibilities and duties?

5. How did your role differ from that of the business mentor? From the OCEL director?

6. How did you establish the relationship between the work experience and the academic component of the OCEL? (What techniques did you use, for example: lectures, group discussion?) Did you encounter any special problems in relating the work experience and the academic component?

7. Has the OCEL program resulted in any changes in your course content or in the scheduling of your courses?

8. Goal-ranking question (see Student Interview, question 14).

9. How did the student, business advisor, and you arrive at a clear understanding of what the student was to accomplish in her OCEL? (If a problem, are there any changes you might recommend to help arrive at such an understanding?)

10. How much contact did you have with the business advisor?

11. How much contact did you have with each OCEL student?

12. How many OCEL students would be the equivalent of a workload

represented by 1 seminar of 8 students? An answer needed for: Independent study? Courses? Seminars?

13. Do you think the 8 hours per week for 1 semester is the best model for most students?

14. In your experience, how does the student receive feedback about the business and faculty evaluation of her performance? (How does she receive her final evaluation?)

15. Here at Alverno, in the ALP program, what role do you see for the OCEL program five years from now? (Is the OCEL more appropriate for one particular major, competence, or level?)

16. Other colleges interested in adopting the OCEL program may still be using the traditional credit system. What should be the relationship between an OCEL program and any liberal arts program? (What should an OCEL contribute?)

17. What advice would you give an administrator who is about to set up an OCEL program?

18. Are there any changes or recommendations you would make to improve the OCEL program at Alverno?

19. Is there anything important I've missed, or anything you would like to add?

APPENDIX C-5

LETTER OF INTRODUCTION TO PLACEMENT REPRESENTATIVES

Dear

Alverno College's Research Center on Women has received a grant from the Women's Educational Equity Act to study the development of the OCEL program. We would appreciate it if you would answer a few questions about your OCEL experience.

The information you supply on this questionnaire will be strictly confidential and used solely for research purposes. If you give us your name we can relate what you say on this questionnaire to other information in the OCEL records. If you are reluctant to give your name, it is important that we have the general information requested below.

Sincerely,

Sandra Moore

Name_____ or

Date of graduation_____ Major_____

Age _____ Working _____

Marital status _____ Full time _____

Children _____ Part time _____

APPENDIX C-6

PLACEMENT REPRESENTATIVE INTERVIEW

1. How did you first become aware of Alverno's OCEL program?

2. Has participation in the OCEL program become company policy or is it a matter of individual discretion?

3. What benefit does _____ derive from participation in the OCEL program?

   Any of the following not given:
   Was the student's work really a valuable contribution or just a learning experience?

   Do you see the program as an opportunity to screen prospective employees (if so, have you hired any?)

4. If you were considering hiring an Alverno graduate, what kind of positions might be more available to a student because of her OCEL experience with you? (List)

   Are these positions: ___usually filled by women?
   ___filled by women as often as men?
   ___sometimes filled by women?
   ___rarely filled by women?

5. What other benefits does the student receive in terms of job training?

6. Do you think attitudes toward women workers are changing? Can you give an example of any of these changes here at _____?

7. In the near future, do you anticipate any changes in the number of women on _____'s staff? Could you list a few positions where the most dramatic changes would be likely to occur? Would there be any changes in positions not usually filled by women?

   (Would there be any changes in managerial positions?) Could you list these positions, please?

8. Does _____ have a formal Affirmative Action program?

9. How do such changes relate to your Affirmative Action program?

10. Does ____ participate in any other college field experience programs? Approximately how many women a year are involved from these programs?

11. Are any of your staff acting as assessors in Alverno's competence-based learning program? Do you anticipate continued participation in the OCEL program?

Now I'd like to ask you about your own experience as an advisor (contact) in the program.

12. As a business contact, what did you see as your responsibilities or duties?

13. How did your role relate to that of the faculty advisor? To the OCEL director? Who would you have gone to if you felt there was a problem with the student's placement?

14. How did the student, faculty advisor, and you arrive at a clear understanding of what the student was to accomplish?

15. How much supervision did you feel the student needed? Approximately how much contact did you have with the student?

16. How much contact did you have with the faculty advisor?

17. What role did you play in the evaluation of the student's accomplishment? Are there any changes you would like to see in the evaluation process?

18. What advice would you give to a student considering an OCEL experience at _____?

19. Part of our function is to help the program recognize the problem areas. Are there any changes or recommendations you might make of the OCEL program at Alverno?

APPENDIX D

CHI-SQUARES FOR PROGRAM VARIABLES, SUPPORT FROM PLACEMENT PERSONNEL, OUTCOME VARIABLES, AND IMPACT VARIABLES

Table D-1. Relationship between Program Variables

Table D-2. Relationship between Program Variables and Outcomes

Table D-3. Relationship between Program Variables and Career Motivation and Career Patterns

Table D-4. Relationship between Support from Placement Personnel and Student Knowledge of Job Structure and Direct Aid

Table D-5. Relationship between Support from Placement Personnel and Outcomes

Table D-6. Relationship between Support from Placement Personnel and Career Motivation and Career Pattern

Table D-7. Relationship between Outcomes

TABLE D-1. Relationship between Program Variables

	Age	Setting	How often activity done by women	Change in activity	Satisfaction with agreed-on time	Effect of pay	Length of OCEL	Student needs in major being met	Employer needs being met	Amount of business contact	Amount of faculty contact	Clear understanding with placement	Satisfaction with evaluation
Age		2.96	.00	.11	.12	.02	.82	.27	.27	1.67	.12	.13	.00
Setting			.12	.42	.72	.09	.25	.95	.23	2.27	.15	1.52	.57
How often activity done by women				1.00	.27	.37	1.06	.13	6.18*	8.26*	.40	2.87	.56
Change in activity					4.70*	.29	1.09	2.85	1.12	.69	.00	.03	.27
Satisfaction with agreed-on time						.03	.04	.20	.07	.20	.33	.02	.71
Effect of pay							1.84	1.99	.69	1.35	.06	1.74	.01
Length of OCEL								.18	.06	.24	.00	1.54	.04
Student needs in major being met									.06	2.60	.46	1.54	.03
Employer needs being met										1.23	.17	2.08	.11
Amount of business contact											1.14	2.70	.00
Amount of faculty contact												.43	.00
Clear understanding with placement													4.08
Satisfaction with evaluation													

*p < .05

TABLE D-2. Relationship between Program Variables and Outcomes

	Help in future job search	Feedback on potential	Test my skills	Experience for résumé	If the job interests me	Having people to learn from	Application of theory and course	Finding out about a variety of jobs
Age	.00	.37	.02	1.42	1.21	.07	4.82*	.63
Setting	9.21*	3.53	.88	.90	3.98	1.89	3.74	.78
How often activity done by women	.13	.03	.40	1.53	.03	2.68	.30	.00
Change in activity	.18	.00	.07	.07	.22	T.S.	.49	.74
Satisfaction with agreed-on time	.64	.71	.06	.17	2.00	1.44	.00	.11
Effect of pay	.44	6.06*	2.19	.06	.14	.71	.33	.34
Length of OCEL	.06	.03	.00	.11	2.09	2.19	.25	.16
Student needs in major being met	.65	1.90	3.66	.37	.01	4.24*	6.29*	.67
Employer needs being met	2.04	.52	.18	1.19	.14	2.02	2.04	.95
Amount of business contact	.66	2.05	.99	.90	.87	.66	2.97	1.13
Amount of faculty contact	6.77*	3.64	.00	4.77	.00	1.60	2.27	.59
Clear understanding with placement	6.13*	6.35*	1.79	2.23	.47	1.60	.04	.16
Satisfaction with evaluation	.27	1.04	.02	.06	.03	.14	.04	.25
Relationship to course content	3.19	1.12	6.00*	.22	1.36	4.46	22.73*	.56

* $p < .05$

TABLE D-3. Relationship between Program Variables and Career Motivations and Career Patterns

	Plan to work	Number of careers	Plan for full time	Marriage as a barrier	Children as a barrier	Presently full time	Salary
Age	.48	.44	2.29	1.52	.02	3.27	5.18*
Setting	7.03*	3.00	1.53	2.01	.17	4.56	3.85
How often activity done by women	.38	1.82	.43	.67	3.49	.24	.28
Change in activity	.43	T.S.	1.13	.03	.04	.00	.69
Satisfaction with agreed-on time	3.56	T.S.	T.S.	.54	1.55	1.62	.02
Effect of pay	.12	1.06	.88	.00	1.41	.06	.32
Length of OCEL	1.29	7.19*	4.44*	T.S.	.02	.00	.13
Student needs in major being met	.90	2.14	2.06	1.75	.82	2.90	.05
Employer needs being met	.79	5.46	.31	1.97	.01	.01	.00
Amount of business contact	.35	2.99	.01	1.68	.62	.65	1.95
Amount of faculty contact	.68	4.82	.32	.01	.02	1.85	.00
Clear understanding with placement	1.61	.53	1.43	.39	1.25	.51	.21
Satisfaction with evaluation	.13	.05	.07	.67	.18	.36	.89
Relationship to course content	1.24	2.50	.57	1.52	1.41	1.22	.09

* $p < .05$

TABLE D-4. Relationship between Support from Placement Personnel and Student Knowledge of Job Structure and Direct Aid

	Student knew best job	Student knew best pay	Student number of jobs remembered	Personnel went out of way to find her a job	Personnel gave references
Successful woman	.02	1.05	6.56*	1.04	.16
Successful woman seen	.97	.01	7.24*	.28	.08
Successful woman who helped	1.06	.00	.68	.83	2.67
Help from other woman	.10	.00	.04	3.54	4.47*
Successful man	3.68	.58	6.44*	1.56	9.94*
Successful man seen	3.33	1.95	4.12*	3.35	9.38*
Successful man who helped	5.74*	.47	1.05	5.62*	12.10*
Help from other man	2.31	.04	.27	1.79	8.70*

*p < .05

TABLE D-5. Relationship between Support from Placement Personnel and Outcomes

	Help in future job search	Feedback on potential	Test my skills	Experience for résumé	If the job interests me	Having people to learn from	Application of theory and course	Finding out about a variety of jobs
Successful woman	.41	.12	3.29	.73	.13	3.44	3.47	3.04
Successful woman seen	.00	.02	1.79	2.78	.48	2.53	7.91	3.52
Successful woman who helped	.12	.49	1.88	.35	.29	9.68*	1.13	.82
Help from other woman	.99	.01	.01	1.00	1.82	.00	.07	.67
Successful man	1.21	1.05	2.56	.04	.69	7.83*	1.34	1.46
Successful man seen	.43	.38	1.02	.08	.60	8.98*	1.12	2.91
Successful man who helped	.01	.12	1.10	.05	1.43	8.97*	1.54	.55
Help from other man	.00	.64	.60	.52	.01	3.52	.11	3.25

*$p < .05$

TABLE D-6. Relationship between Support from Placement Personnel and Career Motivation and Career Pattern

	Plan to work	Number of careers	Plan for full time	Marriage as a barrier	Children as a barrier	Presently full time	Salary
Successful woman	8.27*	4.33	6.77	.01	2.60	.00	3.7*
Successful woman seen	4.02*	5.31	1.68	1.41	4.80*	.01	3.65
Successful woman who helped	5.70*	7.11*	2.02	.07	3.17	.12	1.59
Help from other woman	1.84	6.17*	.06	2.61	3.83*	1.09	1.29
Successful man	.06	.94	.14	.25	.11	.00	.04
Successful man seen	.04	1.97	.04	1.39	.13	.01	.01
Successful man who helped	.10	.80	1.50	.94	5.23	.03	.01
Help from other man	.003	.86	1.28	1.58	.00	.25	.00

*$p < .05$

TABLE D-7. Relationship between Outcomes

	Help in future job search	Feedback on potential	Test my skills	Experience for résumé	If the job interests me	Having people to learn from	Application of theory and course	Finding out about a variety of jobs
Help in future job search		12.90*	1.44	7.08*	T.S.	1.74	1.8	11.2*
Feedback on potential			3.03	.24	T.S.	4.83	.69	4.04
Test my skills				T.S.	T.S.	T.S.	1.20	T.S.
Experience for résumé					T.S.	T.S.	.67	.67
If the job interests me						T.S.	T.S.	T.S.
Having people to learn from							T.S.	T.S.
Application of theory and course								.54
Finding out about a variety of jobs								

*p < .05

APPENDIX E

RELATIONSHIPS FOR PROGRAM VARIABLES, SUPPORT FROM PLACEMENT PERSONNEL, OUTCOME VARIABLES, AND IMPACT VARIABLES

Table E-1. Relationship between the Presence of a Woman the Student Considered Successful and Type of Placement Setting

Table E-2. Relationship between the Presence of a Man the Student Considered Successful and Type of Placement Setting

Table E-3. Relationship between Help in Finding a Job and Type of Placement Setting

Table E-4. Relationship between Type of Setting and Personnel Providing References

Table E-5. Relationship between Practical Application of Theory and Course Content and the Selection of the Placement Meeting the Student's Needs in Her Major

Table E-6. Relationship between the Student's Reporting Testing Her Skills and Selection of the Placement Meeting the Student's Needs in Her Major

Table E-7. Relationship between Practical Application of Theory and the Specific Relationship of the Experience to Course Offerings

Table E-8. Relationship between Testing Skills and the Specific Relationship of the Experience to Course Offerings

Table E-9. Relationship between Ranking of the Goal Application of Theory and Course Content and the Reported Outcome Application of Theory and Course Content

Table E-10. Relationship between Age at the Time of First OCEL and the Reported Outcome Application of Theory and Course Content

Table E-11. Relationship between the Reported Outcome Having People to Learn From and the Selection of the Placement Meeting the Student's Needs in Her Major

Table E-12. Relationship between the Ranking of the Goal Having People to Learn From and the Outcome Having People to Learn From

Table E-13. Relationship between Presence of a Man the Student Considered Successful and the Reported Outcome Having People to Learn From

Table E-14. Relationship between Presence of a Woman Whom the Student Considered Both Successful and Helpful and the Reported Outcome Having People to Learn From

Table E-15. Relationship between the Reported Outcome Feedback on Career Potential and the Reported Outcome Help in Finding a Future Job

Table E-16. Relationship between the Reported Outcome Learning about a Variety of Jobs and the Reported Outcome Help in Finding a Future Job

Table E-17. Relationship between the Reported Outcome Learning about a Variety of Jobs and the Reported Outcome Feedback on Career Potential

Table E-18. Relationship between the Reported Outcome Providing Relevant Material for My Résumé and the Reported Outcome Help in Finding a Future Job

Table E-19. Relationship between a Clear Understanding about Student's Goals and the Reported Outcome Feedback on Career Potential

Table E-20. Relationship between a Clear Understanding about Student's Goals and the Reported Outcome Help in Finding a Future Job

Table E-21. Relationship between the Anticipated Effect of Pay on Student's Activity and the Reported Outcome Feedback on Career Potential

Table E-22. Relationship between the Amount of Student-Placement Representative Contact and the Reported Outcome Help in Finding a Future Job

Table E-23. Relationship between the Amount of Contact between Student and Placement Representative and the Reported Outcome Relevant Material for My Résumé

Table E-24. Relationship between the Outcome Having People to Learn From and the Reported Outcome Feedback on Career Potential

Table E-25. Relationship between Ranking of the Goal Feedback on Career Potential and the Reported Outcome Feedback on Career Potential

Table E-26. Relationship between Contact with a Woman the Student Considers Successful and the Reported Outcome Learning about a Variety of Jobs

Table E-27. Relationship between the Presence of at Least One Woman the Student Considers Successful and the Number of Job Titles the Student Remembered

Table E-28. Relationship between the Presence of at Least One Man the Student Considers Successful and the Number of Job Titles the Student Remembered

Table E-29. Relationship between Knowing the Job Which Is the Best Avenue for Advancement and the Reported Outcome Help from a Man the Student Considered Successful

Table E-30. Relationship between Satisfaction with the Amount of Time Agreed Upon for the OCEL and Someone at the Placement Going Out of His/Her Way to Help the Student Find a Job

Table E-31. Relationship between Age at Time of First Placement and Someone at the Placement Going Out of His/Her Way to Help the Student Find a Job

Table E-32. Relationship between Type of Activity and References from Placement Personnel

Table E-33. Relationship between Help from a Man the Student Considered Successful and Someone at the Placement Going Out of His/Her Way to Help Find a Job

Table E-34. Relationship between Presence of a Man the Student Considered Successful and Reference Provided by Someone at the Placement

Table E-35. Relationship between Help from a Man the Student Considered Successful and References from Placement Personnel

Table E-36. Relationship between the Attitude toward the Effect of Children on Career Plans and Contact with a Woman the Student Considered Successful

Table E-37. Relationship between Presence of a Woman the Student Considers Successful and Career Plans for Five Years from Survey

Table E-38. Relationship between Presence of a Woman the Student Considers Successful and Plans to Work Full Time

Table E-39. Relationship between Number of Anticipated Career Options and Help from at Least One Woman the Student Considered Successful

Table E-40. Relationship between Number of Anticipated Career Options and Help from Women Not Necessarily Considered Successful by the Student

Table E-41. Relationship between Length of OCEL and Number of Anticipated Career Options

Table E-42. Relationship between the Presence of a Woman the Student Considered Successful and Present Salary

TABLE E-1. Relationship between the Presence of a Woman the Student Considered Successful and Type of Placement Setting

TYPE OF PLACEMENT SETTING	PRESENCE OF SUCCESSFUL WOMAN: Yes	No	
Social Services	24	4	28
Community Services*	18	6	24
Business	11	10	21
	53	20	73

$X^2 = 6.89$ $p < .03$

*Includes: Schools, Churches, and Hospitals; Artistic and Cultural Enrichment Centers; Law and Government Offices

TABLE E-2. Relationship between the Presence of a Man the Student Considered Successful and Type of Placement Setting

TYPE OF PLACEMENT SETTING	PRESENCE OF SUCCESSFUL MAN: Yes	No	
Social Services	17	11	28
Community Services	20	3	23
Business	18	3	21
	55	17	72

$X^2 = 6.25$ $p < .04$

TABLE E-3. Relationship between Help in Finding a Job and Type of Placement Setting

		HELP IN FINDING A FUTURE JOB: No	Yes	
TYPE OF PLACEMENT SETTING	Business	12	8	20
	Social Services	20	9	29
	Community Services	6	16	22
		38	33	71

$X^2 = 9.21$ $p < .01$

TABLE E-4. Relationship between Type of Setting and Personnel Providing References

		PERSONNEL PROVIDED REFERENCES: No	Yes	
TYPE OF PLACEMENT SETTING	Business	1	20	21
	Social Services	11	18	29
	Community Services	4	20	24
		16	58	74

$X^2 = 8.42$ $p < .01$

TABLE E-5. Relationship between Practical Application of Theory and Course Content and the Selection of the Placement Meeting the Student's Needs in Her Major

		PRACTICAL APPLICATION OF THEORY AND COURSE CONTENT		
		No	Yes	
STUDENT'S NEEDS MET IN HER MAJOR	Complaints	7	5	12
	Satisfied	11	14	25
	Very well satisfied	6	28	34
		24	47	71

$X^2 = 8.35$ $p < .02$

TABLE E-6. Relationship between the Student's Reporting Testing Her Skills and Selection of the Placement Meeting the Student's Needs in Her Major

		TESTING SKILLS		
		No	Yes	
STUDENT'S NEEDS MET IN HER MAJOR	Complaints	11	26	37
	Satisfied	3	31	34
		14	57	71

$X^2 = 3.66$ $p < .056$

TABLE E-7. Relationship between Practical Application of Theory and the Specific Relationship of the Experience to Course Offerings

		PRACTICAL APPLICATION OF THEORY AND COURSE CONTENT		
		No	Yes	
RELATIONSHIP TO COURSES	Detailed	2	29	31
	Some	9	13	22
	None	13	5	18
		24	47	71

$X^2 = 22.73$ $p < .0001$

TABLE E-8. Relationship between Testing Skills and the Specific Relationship of the Experience to Course Offerings

		TESTING SKILLS		
		No	Yes	
RELATIONSHIP TO COURSES	Detailed	5	26	31
	Some	2	20	22
	None	7	11	18
		14	57	71

$X^2 = 6.00$ $p < .05$

TABLE E-9. Relationship between Ranking of the Goal Application of Theory and Course Content and the Reported Outcome Application of Theory and Course Content

		RANKING OF THE GOAL APPLICATION OF THEORY AND COURSE CONTENT			
		High	Med	Low	
THE OUTCOME APPLICATION OF THEORY AND COURSE CONTENT	No	7	4	13	24
	Yes	17	20	10	47
		24	24	23	71

$X^2 = 8.69$ $p < .01$

TABLE E-10. Relationship between Age at the Time of First OCEL and the Reported Outcome Application of Theory and Course Content

		AGE AT THE TIME OF FIRST OCEL EXPERIENCE		
		19-22	Over 22	
THE OUTCOME APPLICATION OF THEORY AND COURSE CONTENT	No	19	5	24
	Yes	23	24	47
		42	29	71

$X^2 = 4.82$ $p < .03$

TABLE E-11. Relationship between the Reported Outcome Having People to Learn From and the Selection of the Placement Meeting the Student's Needs in Her Major

		THE OUTCOME HAVING PEOPLE TO LEARN FROM: Very well satisfied	Less well satisfied	
STUDENT NEEDS IN HER MAJOR	No	2	10	12
	Yes	32	27	59
		34	37	71

$X^2 = 4.24$ $p < .04$

TABLE E-12. Relationship between the Ranking of the Goal Having People to Learn From and the Outcome Having People to Learn From

		RANKING OF THE GOAL HAVING PEOPLE TO LEARN FROM: High	Low	
THE OUTCOME HAVING PEOPLE TO LEARN FROM	No	1	11	12
	Yes	34	25	59
		35	36	71

$X^2 = 7.82$ $p < .005$

TABLE E-13. Relationship between Presence of a Man the Student Considered Successful and the Reported Outcome Having People to Learn From

		PRESENCE OF A SUCCESSFUL MAN: No	Yes	
THE OUTCOME HAVING PEOPLE TO LEARN FROM	No	7	5	12
	Yes	9	48	57
		16	53	69

$X^2 = 7.83$ $p < .01$

TABLE E-14. Relationship between Presence of a Woman Whom the Student Considered Both Successful and Helpful and the Reported Outcome Having People to Learn From

		PRESENCE OF A SUCCESSFUL WOMAN WHO HELPED: No	Yes	
THE OUTCOME HAVING PEOPLE TO LEARN FROM	No	9	1	10
	Yes	17	37	54
		26	38	64

$X^2 = 9.68$ $p < .002$

TABLE E-15. Relationship between the Reported Outcome Feedback on Career Potential and the Reported Outcome Help in Finding a Future Job

		THE OUTCOME FEEDBACK ON CAREER POTENTIAL: Yes	No	
THE OUTCOME HELP IN FINDING A FUTURE JOB	Yes	27	6	33
	No	14	24	38
		41	30	71

$X^2 = 12.9$ $p < .001$

TABLE E-16. Relationship between the Reported Outcome Learning about a Variety of Jobs and the Reported Outcome Help in Finding a Future Job

		THE OUTCOME LEARNING ABOUT A VARIETY OF JOBS: Yes	No	
THE OUTCOME HELP IN FINDING A FUTURE JOB	Yes	29	4	33
	No	18	20	38
		47	24	71

$X^2 = 11.2$ $p < .001$

TABLE E-17. Relationship between the Reported Outcome Learning about a Variety of Jobs and the Reported Outcome Feedback on Career Potential

		THE OUTCOME LEARNING ABOUT A VARIETY OF JOBS: Yes	THE OUTCOME LEARNING ABOUT A VARIETY OF JOBS: No	
THE OUTCOME FEEDBACK ON CAREER POTENTIAL	Yes	32	9	41
	No	15	15	30
		47	24	71

$X^2 = 4.04$ $p < .03$

TABLE E-18. Relationship between the Reported Outcome Providing Relevant Material for My Résumé and the Reported Outcome Help in Finding a Future Job

		THE OUTCOME PROVIDING RELEVANT MATERIAL FOR MY RÉSUMÉ: Yes	THE OUTCOME PROVIDING RELEVANT MATERIAL FOR MY RÉSUMÉ: No	
THE OUTCOME HELP IN FINDING A FUTURE JOB	Yes	30	3	33
	No	23	15	38
		53	18	71

$X^2 = 7.08$ $p < .005$

TABLE E-19. Relationship between a Clear Understanding about Student's Goals and the Reported Outcome Feedback on Career Potential

		A CLEAR UNDERSTANDING ABOUT STUDENT'S GOALS		
		Some reservations	Clearly yes	
THE OUTCOME FEEDBACK ON CAREER POTENTIAL	No	17	13	30
	Yes	10	31	41
		27	44	71

$X^2 = 6.35 \quad p < .01$

TABLE E-20. Relationship between a Clear Understanding about Student's Goals and the Reported Outcome Help in Finding a Future Job

		A CLEAR UNDERSTANDING ABOUT STUDENT'S GOALS		
		Some reservations	Clearly yes	
THE OUTCOME HELP IN FINDING A FUTURE JOB	No	20	18	38
	Yes	7	26	33
		27	44	71

$X^2 = 6.13 \quad p < .01$

TABLE E-21. Relationship between the Anticipated Effect of Pay on Student's Activity and the Reported Outcome Feedback on Career Potential

		ANTICIPATED EFFECT OF PAY ON ACTIVITY: None or Unsure	Definite Effect	
THE OUTCOME FEEDBACK ON CAREER POTENTIAL	No	11	18	29
	Yes	27	11	38
		38	29	67

$X^2 = 6.06$ $p < .01$

TABLE E-22. Relationship between the Amount of Student-Placement Representative Contact and the Reported Outcome Help in Finding a Future Job

		AMOUNT OF CONTACT BETWEEN STUDENT AND PLACEMENT REPRESENTATIVE: High Contact	Medium or Light	
THE OUTCOME HELP IN FINDING A FUTURE JOB	No	11	23	34
	Yes	21	10	31
		32	33	65

$X^2 = 6.77$ $p < .01$

TABLE E-23. Relationship between the Amount of Contact between Student and Placement Representative and the Reported Outcome Relevant Material for My Résumé

		AMOUNT OF CONTACT BETWEEN STUDENT AND PLACEMENT REPRESENTATIVE		
		High	Med.-Low	
THE OUTCOME RELEVANT MATERIAL FOR MY RÉSUMÉ	No	4	13	17
	Yes	28	20	48
		32	33	65

$X^2 = 4.77$ $p < .03$

TABLE E-24. Relationship between the Outcome Having People to Learn From and the Reported Outcome Feedback on Career Potential

		THE OUTCOME HAVING PEOPLE TO LEARN FROM		
		Yes	No	
THE OUTCOME FEEDBACK ON CAREER POTENTIAL	Yes	38	3	41
	No	21	9	30
		59	12	71

$X^2 = 4.8$ $p < .03$

TABLE E-25. Relationship between Ranking of the Goal Feedback on Career Potential and the Reported Outcome Feedback on Career Potential

		RANKING OF THE GOAL FEEDBACK ON CAREER POTENTIAL			
		High	Med.	Low	
THE OUTCOME FEEDBACK ON CAREER POTENTIAL	No	7	8	15	30
	Yes	16	17	8	41
		23	25	23	71

$X^2 = 7.36$ $p < .03$

TABLE E-26. Relationship between Contact with a Woman the Student Considers Successful and the Reported Outcome Learning about a Variety of Jobs

		CONTACT WITH A SUCCESSFUL WOMAN		
		No	Yes	
THE OUTCOME LEARNING A VARIETY OF JOBS	No	9	13	22
	Yes	7	36	43
		16	49	65

$X^2 = 3.52$ $p < .06$

TABLE E-27. Relationship between the Presence of at Least One Woman the Student Considers Successful and the Number of Job Titles the Student Remembered

		NUMBER OF JOB TITLES REMEMBERED FROM THE PLACEMENT		
		1-3	4-8	
PRESENCE OF A SUCCESSFUL WOMAN	Yes	25	26	51
	No	15	2	17
		40	28	68

$X^2 = 6.56$ $p < .01$

TABLE E-28. Relationship between the Presence of at Least One Man the Student Considers Successful and the Number of Job Titles the Student Remembered

		NUMBER OF JOB TITLES REMEMBERED FROM THE PLACEMENT		
		1-3	4-8	
PRESENCE OF A SUCCESSFUL MAN	Yes	27	26	53
	No	13	1	14
		40	27	67

$X^2 = 6.44$ $p < .01$

TABLE E-29. Relationship between Knowing the Job Which Is the Best Avenue for Advancement and the Reported Outcome Help from a Man the Student Considered Successful

		KNOWLEDGE OF BEST JOB: Some	None	
HELP FROM A SUCCESSFUL MAN	No	10	8	18
	Yes	40	6	46
		50	14	64

$X^2 = 5.74$ $p < .02$

TABLE E-30. Relationship between Satisfaction with the Amount of Time Agreed Upon for the OCEL and Someone at the Placement Going Out of His/Her Way to Help the Student Find a Job

		SATISFACTION WITH AGREED-ON HOURS: Satis-factory	More hrs needed	
PERSON FROM PLACEMENT WENT OUT OF HIS/HER WAY TO HELP FIND A JOB	No	38	12	50
	Yes	8	9	17
		46	21	67

$X^2 = 3.68$ $p < .05$

TABLE E-31. Relationship between Age at Time of First Placement and Someone at the Placement Going Out of His/Her Way to Help the Student Find a Job

		AGE AT TIME OF FIRST PLACEMENT		
		19-22	Over 22	
PERSON FROM PLACEMENT WENT OUT OF HIS/HER WAY TO HELP FIND A JOB	No	28	27	55
	Yes	16	3	19
		44	30	74

$X^2 = 5.19$ $p < .02$

TABLE E-32. Relationship between Type of Activity and References from Placement Personnel

		TYPE OF ACTIVITY		
		Usually done by women	Not usually done by women	
PLACEMENT PROVIDED REFERENCES	No	8	5	13
	Yes	13	38	51
		21	43	64

$X^2 = 4.58$ $p < .03$

TABLE E-33. Relationship between Help from a Man the Student Considered Successful and Someone at the Placement Going Out of His/Her Way to Help Find a Job

		HELP FROM SUCCESSFUL MAN: No	Yes	
PERSON FROM PLACEMENT WENT OUT OF HIS/HER WAY TO HELP FIND A JOB	No	20	31	51
	Yes	1	17	18
		21	48	69

$X^2 = 5.62 \quad p < .02$

TABLE E-34. Relationship between Presence of a Man the Student Considered Successful and Reference Provided by Someone at the Placement

		PRESENCE OF SUCCESSFUL MAN: No	Yes	
REFERENCE FROM PLACEMENT PERSONNEL	No	9	7	16
	Yes	8	48	56
		17	55	72

$X^2 = 9.94 \quad p < .002$

TABLE E-35. Relationship between Help from a Man the Student Considered Successful and References from Placement Personnel

		HELP FROM SUCCESSFUL MAN: No	HELP FROM SUCCESSFUL MAN: Yes	
REFERENCES FROM PLACEMENT PERSONNEL	No	14	2	16
	Yes	21	30	51
		35	32	67

$X^2 = 8.70$ $p < .003$

TABLE E-36. Relationship between the Attitude toward the Effect of Children on Career Plans and Contact with a Woman the Student Considered Successful

		EFFECT OF CHILDREN ON CAREER PLANS: Change plans	EFFECT OF CHILDREN ON CAREER PLANS: No necessary change	
CONTACT WITH A SUCCESSFUL WOMAN	No	12	4	16
	Yes	20	28	48
		32	32	64

$X^2 = 4.08$ $p < .04$

TABLE E-37. Relationship between Presence of a Woman the Student Considers Successful and Career Plans for Five Years from Survey

		PLANS FOR FIVE YEARS FROM SURVEY: Working	Unknown	
PRESENCE OF A SUCCESSFUL WOMAN	Yes	42	7	49
	No	8	9	17
		50	16	66

$X^2 = 8.27$ $p < .004$

TABLE E-38. Relationship between Presence of a Woman the Student Considers Successful and Plans to Work Full Time

		PLANS TO WORK FULL TIME: Less than full time	Full time	
PRESENCE OF A SUCCESSFUL WOMAN	Yes	7	42	49
	No	8	8	16
		15	50	65

$X^2 = 6.77$ $p < .01$

TABLE E-39. Relationship between Number of Anticipated Career Options and Help from at Least One Woman the Student Considered Successful

		NUMBER OF ANTICIPATED CAREER OPTIONS			
		None	One	2-3	
HELP FROM SUCCESSFUL WOMAN	No	9	15	3	27
	Yes	3	29	7	39
		12	44	10	66

$X^2 = 7.11$ $p < .03$

TABLE E-40. Relationship between Number of Anticipated Career Options and Help from Women Not Necessarily Considered Successful by the Student

		NUMBER OF ANTICIPATED CAREER OPTIONS			
		None	One	2-3	
HELP FROM OTHER WOMEN	No	11	22	4	37
	Yes	2	23	6	31
		13	45	10	68

$X^2 = 6.17$ $p < .05$

TABLE E-41. Relationship between Length of OCEL and Number of Anticipated Career Options

		NUMBER OF ANTICIPATED CAREER OPTIONS			
		None	One	2-3	
LENGTH OF OCEL	Typical	11	31	4	46
	Atypical	2	17	8	27
		13	48	12	73

$X^2 = 7.19$ $p < .03$

TABLE E-42. Relationship between the Presence of a Woman the Student Considered Successful and Present Salary

		PRESENT SALARY		
		Less than $9,000	More than $9,000	
PRESENCE OF A SUCCESSFUL WOMAN	Yes	22	17	39
	No	5	17	22
		27	34	61

$X^2 = 5.18$ $p < .02$

APPENDIX F

CHI-SQUARES AND TABLES FOR COMPARISONS
BETWEEN GROUPS OF STUDENTS

Table F-1. Chi-Square Values for Comparisons between Student Groups

Table F-2. Relationship between Present Employment Status and OCEL Participation

Table F-3. Relationship between Participation in OCEL and Other Field and Internship Experience

Table F-4. Relationship between Participation in the OCEL Program and Present Employment Status

Table F-5. Relationship between Number of Career Options and Participation in the OCEL Program

Table F-6. Relationship between Census Employment Categories and Participation in the Program

TABLE F-1. Chi-square values for comparisons between student groups

Variable	Chi-square
Type of degree	1.51
Year of graduation	.93
Additional field and internship experience	21.15*
Age at time of survey	5.29
Marital status	.55
Number of children	2.09
Present employment status	11.91*
Continuing education	2.55
Plans to work	.12
Number of career options	8.76*
Plans to work full time	1.74
Marriage as a barrier	.95
Children as a barrier	6.56

$p < .05$

TABLE F-2. Relationship between Present Employment Status and OCEL Participation

		PRESENT EMPLOYMENT STATUS: Full time	Less than full time	
OCEL PARTIC-IPATION	No interest	28	63	91
	Interest only	20	16	36
	OCEL	19	62	81
		67	141	208

$X^2 = 11.91$ $p < .05$

TABLE F-3. Relationship between Participation in OCEL and Other Field and Internship Experience

		ADDITIONAL EXPERIENCE			
		None	Field	Intern-ship[a]	
OCEL PARTIC-IPATION	No interest	26	11	54	91
	Interest only	9	11	12	32
	OCEL	28	12	14	54[b]
		63	34	80	177

$X^2 = 21.15$ $p < .0003$

[a]Students with both field and internship experience are included here.

[b]This question was not asked in the early part of the OCEL survey.

TABLE F-4. Relationship between Participation in the OCEL Program and Present Employment Status

		PRESENT EMPLOYMENT STATUS		
		Full time	Less than full time	
OCEL PARTIC-IPATION	No interest	63	28	91
	Interest only	16	20	36
	OCEL	62	19	81
		141	67	208

$X^2 = 11.91$ $p < .0026$

TABLE F-5. Relationship between Number of Career Options and Participation in the OCEL Program

		NUMBER OF CAREER OPTIONS ANTICIPATED: One or more	None	
OCEL PARTIC-IPATION	No interest	30	61	91
	Interest only	5	30	35
	OCEL	13	68	81
		48	159	207

$X^2 = 8.76$ $p < .0125$

TABLE F-6. Relationship between Census Employment Categories and Participation in the Program

	OCEL	No Interest	Interest Only
Professional	26	15	9
Teachers and Nurses	29	49	13
Other	24	16	9
Total	79	80	31

$X^2 = 10.73$ $p < .05$

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